ECONOMICS OF THE HOUSEHOLD

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ECONOMICS OF THE HOUSEHOLD

Its Administration and Finance

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PREFACE

THIS book, which treats the general administrative and financial background of the private family household, is offered as a text book in colleges and other higher institutions and as a reference book in schools.

The American household as its social ideal takes form is an institution in which two adults form a partnership with equal responsibilities, make equal contributions to its support, and draw out equal returns not only in the daily physical services of food, clothing and shelter but as well in the broadening of experience and all the satisfactions of life. As junior members enter the group, they are advanced as rapidly as possible to a full partnership relation. At its best the group provides for its members, adult and child alike, broad opportunity for the development of individual personality. As members of a small social group that cares, the family supports each member as long as that is necessary and puts demands upon him when he can bear them; criticises or encourages in turn as either is needed, and shapes the individual to take a place as a man or woman in the world. For the adult and increasingly for the child, the home is the place where individuals immersed in broader social relations find still a rock on which to stand. The social values in American family life give it a message for the world as the democratic movement changes the relations of men, women and children in all lands, and education for and about the home will therefore have an increasingly important place everywhere.

These social results of sound family life can be had only if

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the economic basis of the household is sound and it is the latter problem that comprises the subject of this book. Among the knowledge of high practical importance must be counted that which helps the individual and the individual family to make an economic plan of life that will meet present and future needs and result in the largest possible amount of satisfactions. The book enters a new field, and its treatment must therefore be suggestive rather than exhaustive.

Its purpose will be achieved if those who use it are helped to look about them and better understand the social mechanism that provides the daily living of individuals and family groups; if they come to appreciate better the services of the household to themselves, and if they are helped to set standards for themselves as to its best organization and administration. The book is not simply a treatise on the management of a home but rather a consideration of the economic matters that concern all homes.

The issues in the book concern therefore men as well as women, and in general ways men as much as women. In our higher institutions, while economics as a theoretical science makes progress, there is also increasing attention to its applications to agriculture, manufacturing, trade, transportation, salesmanship, and occasionally to the economic problems of the consumer. The Economics of the Individual and of the Family Group includes problems of concern to men and women alike, and this book it is hoped may suggest the consideration of some of these matters in the general college departments of economics and social science as well as prove of use to specialists in household economics.

The book includes in addition to the text, a series of about five hundred problems dealing with the various aspects of the economics of the home.

The author expresses his appreciation to all his former students with whom the material here presented has been developed in successive classes; to many who have made con-

tributions of fact; and to Professor Henry C. Sherman of Columbia University and Dr. Emma A. Winslow, Lecturer in Teachers College, who have made suggestions regarding contents and arrangements.

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ECONOMICS OF THE HOUSEHOLD

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CHAPTER I

HOUSEHOLD ECONOMICS AND THE HOME

Economics of the household.—It is the purpose of this book to examine the business of housekeeping and homemaking, by which the institution of the family is maintained. There will be taken into account especially those matters of general concern which arise both within the family and in outside society and have connection with housekeeping and homemaking; that is, those administrative and financial problems of the home in which the community or society in general may properly be interested but usually not including that part of the detailed procedure of administering the individual home which is comprised in the art of household management as distinguished from the economics of household administration. Household economics may be defined, then, as the social science of the business of housekeeping and homemaking. "Housekeeping" is to be understood as comprising the productive work of the household involved in making ready food, clothing, and shelter for its members, including the use of these and other economic goods and services; "homemaking" is the direction of the personal life of the family group. The consideration of the general business aspects of both fields is included in household economics.

Economics.—The modern science of economics which is the study of general business problems in terms of their social significance began as household and agricultural economics.

The Greeks early grappled with the problem of efficiency in administration and Socrates, father of the inquiring mind, is reported by Xenophon in the charming dialogue "Œconomicus" as discussing with a young Greek the proper management of the household and the country estate.

Our word "economics" is from a Greek compound term: *οἶκος*—household property, estate; and *νόμος*—management. From domestic and agricultural economy, "economics" as a theory of management widened to include city and state economy (political economy) and, finally in modern times, to the principles underlying the operations of the whole business community, or of industrial society. Modern economics is the science of our larger business situation, the social theory of business activities; it treats only matters of general or social concern, not details of business management, and so one finds in it the principles determining wages, rent, interest, and profits, and discussions of such practical problems, viewed socially, as money and banking, insurance, tariff, labor, and transportation. Its field is thus the wide world of business relations; and the underlying general principles in this field comprise general economics. Economics in Seager's compact phrase is the "social science of business" or of mankind's existence activities.

As "economics" indicates the social science of private business, modifications of the term have come into use as follows: "social economics" to indicate the organization and functions of social agencies as church, industry, school, the home, philanthropy, organized recreation, etc., and this term is also sometimes used to indicate the field of constructive social agencies which are a marked feature of modern life; numerous special economic fields have also been marked off, as "industrial economics" which treats the general problems of industrial organization and management including problems such as wage adjustment, personnel work, legislation affecting industry. Similarly, rural economics, medical economics, and finally the economics of household administration, is each a special sub-

ject intended to present the general or socially important facts of organization and administration in its particular field, stated as far as possible in the form of a science.

The terms "economy" and "economics" are sometimes confused. Economy is the older term and standing by itself it carries a significance of thrifty management of household or other resources as in the phrase "she practices economy"; it suggests a sense of suitable proportion, a knowledge of relative values, an ability to adjust means to ends: properly used, it does not imply penuriousness or parsimony. Economy has also an occasional use in referring to the principles of organization and control applied in any field, as the economy of nature. Economics is a modern term emphasizing the scientific approach to a field of practice; it indicates the organized or scientific knowledge regarding an art. Household Economics therefore presents the generalized facts, more or less organized in scientific form, regarding the maintenance of the household.

Household economics considers work and life.—The business of conducting the household is a double undertaking: it involves housekeeping, or the work of providing the material supplies of food, clothing and shelter for the family group; and also homemaking, that direction (unconscious though it may be) which the home woman, aided more or less by the man, gives to the personal living in the home. The proper business of the home is work and life alike. The home provides the exclusive work place for nearly half the adult population and calls for some work contribution from all others, while it is the living place for all. The home shelters a double process, living and working, and hence household economics must take account of both work and life in the home, both ultimately in respect to their meaning for the persons of the family.

By measuring values.—In its aim to study conditions of household well being, household economics is as far as may be possible a quantitative or measuring science, taking account of outgoes of effort and income of satisfactions, or of costs and

corresponding values secured. The excess of values over costs or of returns over expenditures measures prosperity in the household and elsewhere—and so general economics has been sometimes defined as the science of prosperity or well being. The ultimate expenditures and receipts with which any economics deals are psychical costs and psychical income, though they are conveniently but not always adequately described in terms of money. Parts of the discussion of household economics are in terms of money, but back of the money is the experience of expenditure of energy and of enjoyment secured or the degree of well being attained, which is the ultimate issue.

Problems of household economics.—The equation of general economics includes three terms: (a) human needs, (b) the efforts to secure the commodities and services to satisfy needs, which comprise the productive activities of society, and (c) the consumption of these commodities and services resulting in the satisfaction of needs. The part which the household plays in human needs, in productive activity, and in economic consumption, all looking to human satisfaction, welfare, prosperity —suggests the field of household economics. One might take as alternative titles for our study: "The Wealth and Services of the Household," "Costs and Values in the Household," "The Structure and Functions of the Household in Relation to Welfare."

Our concern will be to present a complete picture of households in general, particularly as to their purpose, the ways in which they are operated or carried on by the persons responsible for them, and their relationship to other undertakings in the outside world. Our concern is not so much the detailed rules by which the work of a household, such as food preparation or child care shall be performed; but rather house work and home life viewed in their wider setting, both as regards the family group, and the community and other social groups.

The maintenance of a home, what is it that is maintained, what is its value, and how is it maintained, this is the problem of household economics.

Purpose of the Household

The purpose of a home is accomplished if it creates a reasonable happiness for the two individuals who form it and promotes useful relations for them with society, and if it rears children who can take a place in society that is at least as serviceable and satisfying as that which their parents held before them. Moralists never tire of pointing out that the family exists for the child, just as social students have stressed its relation to the state which is composed of family units and depends for its strength upon them. We overlook the fact that it is first of all a selfish enterprize for the satisfaction of the two people who establish it. A home is itself primarily for the man and woman who create it. Our own happiness may not seem an inspiring goal, but it may be an energizing one that leads on in its due time and place to all the services which the home renders to the child and to the state. In many homes there are also present from the first other more social motives and such motives seem increasingly conscious in modern society.

Why "household"?—Shall such a study as is proposed be called a study of the home or of the family or of the household? Each term has in American usage distinctions which are worth noting. We evidently need a term comprehending the whole domestic situation, but emphasizing a certain aspect of it, namely, its business and managerial features viewed broadly.

The term "family" emphasizes the personal group in the home, and is used with a broader or narrower meaning: first, it may indicate the collective body of persons—parents, children, servants, lodgers even, who live in one home and under one head or manager: in this sense it is equivalent, in part, to the term "household"; the term "family" has also and more commonly, the narrower meaning of husband and wife, or of husband and wife and dependent children, the two-generation group who constitute the fundamental unit in the organiza-

tion of society. The word "family" used either broadly for the enlarged personal group in the home, or more narrowly for the two-generation group, has always a personal reference, it means *persons*. For this reason, this term is not inclusive enough for the study here proposed, which, while having regard to persons, will also consider business conditions of materials, money and the other means of housekeeping by which the family's home is maintained.

The term "home" means primarily dwelling place, family house, habitual abode; and the word carries with it especially the personal associations of household living, with all its conditions and circumstances and the feelings and sentiments which cluster about one's place of permanent residence; sometimes the word has reference to the family group as the home circle. It tends therefore to be an inclusive term, but the psychology of the word "home" suggests the affections of the family group rather than the activities which maintain it; and therefore it does not describe accurately the study here proposed. "Home" suggests protection and rest; while "household" is more dynamic, suggesting the organism or mechanism of daily living, its parts and processes in their mutual relations, and so the latter term is more to our purpose here than is the word "home." It may be urged that "home economics" is the current term of broadest significance to indicate education for the home, that it is used in Federal legislation and in government and state bureaus, and by professional organizations of teachers; and, hence, that current usage would suggest "home economics" for a study of the broader social questions of housekeeping and homemaking rather than the term "household economics." As reply to this it seems enough to say that while "home" economics is an inclusive term for all education concerning food, clothing, shelter, and house management, yet a science based upon general economics (business) applied to the family situation or home finds a more appropriate descriptive term, one closer to the point of view of economics, in the word "household" than in the word

"home." The general subject-matter of all education for the home may be called "home economics," for "home" is broad enough for the purpose and the sentiment of the word is an element of strength in its use as title of a movement which must make its way by securing popular approval.

The word "household" seems most appropriate to the purpose of this study, since it includes the personal group of the family, and so agrees with our purpose to engage in a social study or one concerning personal values, and yet it is not exclusively personal, as is the word "family"; it also has reference to the house and its contents. On the personal side, it refers not only to the two-generation group of parents and children, but also to all other persons in the house, relatives, servants, guests and others; it suggests, too, the business equipment, materials, and activities of the house In short, "household" is inclusive of all that the "house holds"; it includes the persons and materials of the home, it also has reference to the activities necessary for maintaining the home. To quote Murray's admirable definition in the "New English Dictionary," household means "an organized family," or a "domestic establishment." It is precisely this domestic establishment which we propose to study in household economics.

The household described.—An analysis of the household or organized family may be made as regards two of its aspects: first, the structure of the household or its parts, and second, the functions which it serves, dividing the latter again into two inquiries, the more general functions of the household, and its more detailed activities. Such an analysis follows a distinction common in science, to describe structural organization and then, separately, functional activities and purposes, just as in studying the human body, for example, anatomy describes parts, and physiology describes purposes of parts.

The structure of the household.—In enumerating the distinct units into which the household may be divided, by an obvious distinction it may be said to be composed of persons

and of non-personal or material items, which are related to one another within the household and together have external relations to the environment of persons and things in the midst of which the individual household is found.

Of material elements, a household involves the following, at least: (1) the house structure or domicile in which the family lives, whether it be one's ideal of a detached house with lawns, or crowded quarters in a slum, with all the material things that the house contains, particularly; (2) the capital of productive equipment, utensils, and supplies used in the work of the household, such as food materials and food equipment, ranges, kitchen utensils, and fuel for cooking, and the equipment for the care, cleaning, and storage of personal clothing and that for the care and cleaning of the house; and (3) the capital of consumption goods for the immediate gratification of human needs, such as the furnishings of dining rooms, living rooms, and bedrooms, clothing and personal effects, books, musical instruments, art and athletic goods, and all the rest of the paraphernalia of living commonly found within the house for the immediate use and satisfaction of the family group.

Of the persons appearing as factors in the typical household there may be enumerated: (1) the husband and wife; (2) their children; (3) occasionally, aged parents and, less frequently, other dependent relatives; (4) hired helpers or household employees who occasionally or regularly perform, in part or whole, the work of the household; (5) guests or those whom the household group welcomes in hospitality whether in formal entertainment or as the neighbor dropping in; and (6) in some homes, lodgers and boarders who for the sake of adding to the family income are given a share in the forms and materials, at least, of household living.

The environment of the household comprises similarly both personal and material factors. The former are the institutions of society: (1) other households especially, since to any given family group a large part of its life arises from inter-family

relationships, and every home is set in a medium of numerous other homes, with a smaller or greater number of which interchanges of service and other social relationships exist; (2) the industrial or economic organization of society; (3) the school; (4) the church and the religious organizations; (5) the miscellaneous social organizations as clubs and societies, fraternal and other groups; and (6) the various institutions of government, the local community, the state and the nation and, in occasional households where there is consciousness of the family's responsibility for social training, the world organization of international relationships. All these and other centers of social structure are evident as one looks out through the windows of a single home, and the relations resulting therefrom in part determine what a household is.

But the environment of a household includes, too, certain outside material factors which play upon it, such as the building site which it occupies, whether amid tenement blocks or open country, the surrounding streets, the grounds, the lawns and gardens, the conditions of climate and the exposure to sunlight and to air movement, the adequacy of food supply and all other kinds of materials upon which the household draws for its maintenance.

In such a skeletonized sketch, we recognize the frame-work of a typical individual household as it might appear to one disposed to enumerate its parts without reference to their purposes, a family composed of an adult man and an adult woman, of children, in a house with all its working gear and goods that serve immediate needs; with other persons temporarily or more or less permanently within the house as guests, workers, lodgers; and then this single household set in an environment of other homes, of social institutions, and of material conditions. How does this structure function, what are its general purposes?

The functions of the household.—The question of function can be asked either as regards the purposes served by individual items in the household, such as house, or em-

ployee, or food stuffs; or it may be asked regarding the whole household organization of persons and things and processes and this is the inquiry which we shall pursue here: just what large ends does it serve as a whole in human life? There are three large ends that the household serves: biological, economic and social.

The biological function of the household concerns, of course, the perpetuation of the race through family life. This may be called the family-building aspect of the home, the formation and increase of the family. In the birth of children the family performs its unique racial service that human life may continue. In the facts of time limitation of the individual's life, in the marriage of man and woman, in the birth of the new individual as the method of race continuance, in the helplessness of the infant, in the prolongation of infancy, in the long span of adult self-dependency, and in the feebleness of old age and second childhood, lie nature's plan of family life. The foundation of a family in marriage and the continuance of the race by physical parenthood may not, in modern times, be laid upon every individual as an inescapable duty as is done among primitive peoples, but the facts of heredity make it certain that a person of unusual endowments who would serve most widely must not only serve in his own person and in his own day but may serve society also by transmitting his traits to off-spring who will continue the service through other generations. Judged by personal and social welfare, this principle of the service possible through racial continuance can scarcely take second place to anything else among ideals worthy of controlling human action. The contrary principle that persons of marked defects should abstain from marriage has been much urged recently. Doubtless the insane and the feeble-minded must be restrained from perpetuating their kind, but for those persons who are nearly normal, or in whose families only, not in themselves, there are traces of mental abnormality the last word of science is that marriage into certain other stocks may be entirely safe, and that the securing of advice

from competent specialists based on a study of the detailed family history of those proposing marriage is the wise step.[1] The fundamental need is for a lively sense of responsibility as regards the gift of life which each has in his or her keeping. There is obvious need for popular education in the facts, as soon as they are determined, which are collecting in the new science of eugenics defined by Galton as dealing "with all influences that improve the inborn qualities of the race."

The economic function of the household is expressed in housekeeping, or the domestic activities concerned with providing for the family as to its needs of food, clothing, and shelter; and also in the outside livelihood activities of society, so far as they come in contact with the household. The livelihood process has two parts, the creating of useful commodities and services, or economic production of wealth, and the utilization of this wealth for human well-being or consumption. Economic analysis at present is giving particular attention to an intermediate stage in production, namely, distribution or the dividing of the wealth produced among those who produce it, in money incomes of wages, rental, interest, and profits. Now the household has an important though little-heralded relationship in each of these economic fields of production, distribution, and consumption.

In the first place, as regards production, historically the household was if not the first, certainly long the sole productive agent, and until the Industrial Revolution it remained the central agent in all production; and it still does important productive service. In the food industries for example, there is, outside the home, the work of farm and ranch, of mill and packing house, of wholesale and retail food trade; but in the homes of this country, twenty-odd million women spend 4 to 6 hours a day, on the average, on work concerned with making food ready for human use. Of all the productive labor hours

[1] Such criticism may be had from Carnegie Eugenics Laboratory, Cold Spring Harbor, New York; or from the department of biology of any university. See, Adolph Meyer, "The Right to Marry," *Survey Magazine*, 36, 1916, 243-6.

connected with food, more than half probably is contributed by home women. As regards other economic goods as well, the household is the final productive agent and thus renders a great social service.

In its second economic relationship, the household is the final agent of economic distribution to individuals. The economists have analyzed the distribution of values produced into the personal money income of wage-earners, capitalists, landowners, and enterprisers; and have pointed out the distinction between *money* incomes and *real* incomes or the amount of economic goods which the money income will secure. Now, it is just here that the household is effective; it is the household that for the normal individual makes the exchange of money income into goods or real income. In this transfer it is obvious that general economic conditions determine the kind of living a given family can secure; first, the stage of economic progress reached by society at the time concerned which controls the general rate of productivity and the kinds of goods available for purchase in a given market; next, the general level of wages and other incomes which controls the amount of money available in a family; and finally the general level of prices which determines the ratios at which money is changed into goods. Yet, it is also obvious that, given these three conditions, the immediate active cause of high or low real income in a family is efficiency in the housekeeping function of turning money into goods, and that, thus viewed, the household rather than the pay envelope is the ultimate agent of economic distribution.

In a second and important, though little regarded sense, the household controls distribution to individuals. A household combines several persons differing in economic needs, those of the man, the woman, the little child, the older boy or girl. Now, the control of the household purse assigns to each of these, or fails to do so, the economic goods upon which his or her best development depends. Shall parents, by wasteful personal expenditures for their own pleasure narrow a child's

possible world; or shall an over-indulgent parent develop excessive self-esteem in a child, that just as surely narrows his usefulness? It is such practical issues that are involved in the family's ultimate control of the distribution of real income to the individual members of the family.

In its third economic relationship, the household stands as the chief agent of economic consumption; that is, in its use of wealth in the gratification of human needs. It is not the sole place of consumption, for the theater, the public park, the library and museum, the church, are all places of consumption; but note that though the act of consumption take place outside the house, yet for the normal family the consumption is still a household act largely, provided for through the household purse, and determined upon by plans made by the household group. It has been pointed out that the direction of wealth consumption is an economic service as far-reaching in its consequences for welfare, as efficiency in the gross productive work of industry and commerce.[1] It is this consumption process which is behind the demand of the retail market and hence of the wholesale market; which is to say that the household purse, however much its judgments may be cajoled by the advertiser and wheedled by the retail salesperson, is still the final arbiter by which industries rise and fall and by which the course of economic progress is in considerable part determined.

The determining how wealth shall be used, in what quantities, in what variety of selection, in what harmony of combination, by what persons, and in what times and places, appears as a central responsibility of household economy. By it, a material control over individual and social welfare is being exerted, the authority of which is not one whit lessened by the fact that it has been more or less unconsciously performed and, performed with much less success than is patently possible were society to give appropriate attention to the house-

[1] Devine, E. T. *Economic Function of Woman*, American Academy of Social and Political Science, Philadelphia, Pub. No. 183. Also, reprinted by Teachers College, Columbia University, New York.

hold's economic responsibility as the user of economic wealth as it is now beginning to do.

In economic relations, therefore, the household is, first, a wealth-creating agency of importance; next, it is the agency of distribution which both transmutes nominal money incomes into real incomes composed of desired economic goods and services, and also acts as the controller in allotting the precise amount of economic gratification to the individual man, woman and child who share a family income; and finally, by its direction of the wealth-using process, it is able according to the measure of its efficiency to increase, or it may decrease, the satisfactions which family life affords.

The social function of the household is expressed in home-making, as contrasted with housekeeping, or in the personal life of the family group. It concerns the mental reactions arising in family life, for social life has been well defined as that part of personal life which is based on the inter-mental life of human beings. The obvious social function of the family lies in the transfer of culture to the child, but there are other noteworthy social facts which are frequently overlooked.

The primary social relation of the home is that between two adults, and literature is largely a portrayal of the mental broadening and enrichment incident to the establishment of a new home. There is a lifelong progressive culture for its two adult members in the home relationship, from which even the dullest mind gets some inkling of a broader sympathy and so extends his family principle of mutual aid out into wider social relationships; while to thoughtful minds the family is almost another expression for the fine art of living. For the average individual it is the home that develops unselfishness and thought for others; the house comrade provides another mind and another self, daily contact with which develops one's own mental resources, as well as promotes kindly adjustments of habit whereby life runs smoothly in all social relations. As the sociologists have pointed out, the household is a chief

source of the cooperative spirit on which all social organization depends.

When a child comes into the home, there is education for the parents as well as for the new-comer; there is adjustment not only between each parent and the child, but between the two parents themselves, and this viewed first in their relation one to the other, and again as viewed in their joint relationships affecting the child. The man must learn respect for the woman's condition before and after the critical event of birth, respect that shows itself not only in his efforts to save her from over-exertion, but in a changed attitude toward woman's biological work for the race. One sees a practical result of it, for example, in legislation forbidding women to be employed during a period of a month more or less before and after childbirth; such a law reflects the education of men and women too, singly, one by one in the life-giving experience of the individual home. It is a truism, of course, that the parent who follows and aids in the mental development of a child, receives himself or herself an intellectual training that is of very real value.

The difference between a husband and wife, at middle age, broad-minded, well-poised, sympathetic, humane in their views of others, and the same couple, a score of years before, self-centered, individualistic, is a measure of part of the social results of household living as affecting its adult members.

For the child, the home's social purpose is to develop the thoughtless being of the little child into the thinking, judging, feeling, acting person he has become when, after four or five years, he enters the school. The household gives to each new generation the guiding ideas and standards of the present generation; it transfers civilization down the ages and to each generation offers a platform of past achievement upon which progress may be made. In the household, the child learns physical control, to walk, talk, use hands and feet; here habits of food-taking, and other responses to nature's needs, are fixed. Mental habits, as of observation, and thinking or prob-

lem-solving, become part of the child's equipment. Useful personal attitudes, as of cooperation and helpfulness, are encouraged, and their opposites, as of lying and selfishness, are discouraged.

Other social services of the household concern its protecting function as regards the care of the aged, and not less their utilization in the education of the grandchild, a real service as any one can recall out of personal experience. The responsibility of the household for aged parents may seem to be giving place to a social responsibility, if one considers the present movement toward retirement allowances and pensions for the aged; but, in fact, financial provision for the aged will not destroy the unity of families, but simply, by relieving the younger generation of a financial load, make possible by supplementary aid a close unity between the succeeding generations.

The household furnishes, too, the focus for hospitality-activities and is the center for "social life" so-called. That this has great social value despite its traditional inanities, is evident from its contributions to good-breeding in children, its relation to match-making among young people, and the real pleasure it affords many adults.

In summarizing the three general purposes of the household as related to human experience, one may say that, first, as a racial or biological institution, the household creates the individual physical life; second, as an economic institution, it maintains the individual's life or provides the creature necessities such as food and shelter required for living; and third, as a social institution it enriches and humanizes life, developing the self and providing the social contacts apparently necessary for the growth and endurance of the wholesome, satisfying personal life. Physical existence, economic maintenance, personality, are the three rich gifts of the household to the individual. Viewed as services to society, family-building, housekeeping, and homemaking, are the three major processes of the household.

The immediate functions of the household.—A statement of the household's threefold purpose as racial, economic, and social, looks outside this institution to the large life processes of race perpetuation, of self-maintenance, and of culture-transmission. Viewed from within and at closer range, the household presents a varied series of activities or happenings which may be called its immediate functions. These are the succession of events, day in and out, or occasional in nature, which might appear in the note-book of a scientific observer. There are the items of the physical life, some daily, such as those of sleep, of food-taking, and ablution; others epoch-marking, as birth, sickness, and death. There is the "work" of the household; its daily round of marketing and shopping; the thrice daily service of food, including planning, cooking, serving and cleaning; the redding of rooms, and the working of the house, its care and cleaning and that of the house furnishings; care of clothing, including its laundry, repair, and storage; and all the care of self and of others. There is some work which has but little personal value, such as that of ordinary cleaning; though on its proper performance personal health and welfare may depend; while other items, as the care of self, children, the sick, and aged, are most personal in their immediate character and value.

In the range of personal aspects of the household process, an acute observer would note the fundamental fact that here persons live in certain relationships that differentiate the household group from every other social group; there is present an instinctive attitude of mutual aid, a natural consciousness of kind peculiarly strong and binding. In the home each is for the other as much as for self; each participates in the interests, ambitions, and expenses of the other, resulting in an interplay of mind, unique in its quality and its lifelong persistence. The creation, continuance and development of the family mind is the most characteristic process, if not the most obvious one, in the household experience.

The observant student of the household would surely note

the fact of unpaid unsolicited human service in the household: it is within this group that graciously and unrequitedly we do for one another. The round of personal life here also gives time, now for recreation, now for personal-improvement activities, now for the coming of outsiders in hospitable guest relationships, and now for the more temporary contacts of "social" activities; and philanthropic service, civic and political activity, and religious relations occasionally appear as factors in the experience of the family group.

A complete list of these immediate activities of the household is not purposed here, but simply to indicate something of the number and variety of the happenings that enter into the household process, all of which are expressions of the physical, economic, or social purpose of the institution.

Domestic versus institution households.—The household, considered as a method of living, presents two fundamental types, viz., the domestic household, constituted by the natural kin group of two parents and their young children, and the large group or institution household, composed of an artificial group of persons not related by kinship, but joining together more or less temporarily to meet some needs of daily living, such as food or shelter. The domestic or kin household presents in America three economic types—the farm household, or that of the family engaged in agricultural industry; the town household, that located in villages and smaller cities, where building space adequate to provide surrounding open space of lawn and garden for each household still prevails; and the city household, that in which the household group is more or less restricted to the interior housing space alone.

In the farm household, production for the market and for the family's living are closely interrelated. The man's occupation determines the living for his family, as is true in no other vocation, and the man's vocation modifies the woman's housekeeping in many respects. For example, the farmhouse is usually located away from public services, such as community water-supply, sewerage, gas, and electricity; the farm house-

hold finds its source of certain supplies in the commodities produced on the farm rather than in purchased goods; productive work for maintenance of the household, such as canning, baking, laundry, remains in the household to a greater extent than in town and urban households.

The farm household performs certain services for the farm, as in boarding the farm help; in many cases the farm woman works occasionally, if not regularly, on the farm; and supplementary vocations, such as poultry-raising, are available for the housewife or her daughters, and conditions encourage such occupations. On the farm, the household site may be most ample with extensive kitchen garden for vegetables and fruits, poultry yards, and the like, and with lawn and flower gardens as large as time and strength permit. One of the most striking changes in rural life just now is, however, a relative decrease in production for immediate consumption, and an increased dependence upon money income and the use of purchased goods.

In town or suburban households, the site is restricted to a house plus a more or less liberal lot, which usually means a lawn at the front, and a garden at the rear. The lack of care which these spaces suffer, and their occasional use as dumping ground for ashes and rubbish, is not an argument for their discontinuance, but rather for education in their proper use and care. In the town household the man's productive work is separated from the household; there is a more nearly complete dependence by the family upon purchased commodities for supplies, although gardens are common and occasional families keep poultry. The housekeeping industries of cooking, laundry, cleaning, are typical of these town households, although replaced increasingly by public service companies and commercial enterprises, such as bakery and laundry. From the point of view of child welfare, the village or suburban home situation combines the desirable elements of open country or farm life and of community life.

In the urban household, the site has been reduced prac-

tically to housing space only. Open areas for sake of light and air are often required by law about congregate dwellings and appear as community parks and play-grounds, but individually owned lawns and gardens and play spaces for children in large cities are too commonly entirely absent. Except in households where sweated labor is performed, and a few other exceptions such as sewing and dressmaking, artistic and literary work, there is usually no household production for the outside market; there is still much household production for the sake of the family, although judgments are continually being passed that the urban household has lost its productive activities, and become a place of economic consumption only. However, as long as cooking, cleaning, housework, storage, child-care go on in the household, so long there will be economic production there. The amount of production varies in the city household and the household that has almost solely consumption activities has nearly arrived in the case of apartment hotel life, where one may purchase furnished-apartment accommodations, table-board, room-care, laundry, and valet service for clothing and other personal needs, while outside industry furnishes ready-made clothing and other commodities which the home once provided.

Parallel with the reduction of household production have grown up outside industries and services, the products of which go into the home and make unnecessary certain production tasks there; but that is a matter to examine in detail.

The large group or institutional household may be defined as a grouping of persons not a natural family brought together for some economic or social purpose normally served by the domestic household, such as the provision of food, shelter, clothing, hospitality; related to the institution household are the commercial enterprises which provide some one or other of these services for compensation; and for the sake of seeing the present place of former household functions in modern society, both may be considered here. These large-scale household services may be classified first as to whether they provide

a more or less complete substitute for all the services of the domestic household on the housekeeping side or whether they concern some single household activity organized on a large scale. Of the complete institution households, some are self-supporting institutions conducted for profit and depending on earnings for support such as the transients' hotel, boarding house, apartment hotel, clubs, houses for either bachelor men or women; and some are institutions for economically dependent persons, which are supported in whole or part by society, such as the homes for orphans and the aged, school dormitories, and working girls' homes which last under a false economic policy have been often on a basis of dependency.

Besides these rather complete substitutes for the services of the domestic household, there are numerous enterprises, industrial or commercial in nature, which provide a service based upon some one or other of the intimate household services, "partial institutional households" they might be called. For normal economic persons, there are the restaurant, public dining room, lunch room, and cafeteria for the service of food, and the bakery, food depot, and delicatessen store for the preparation and sale of food. There is the lodging house, Pullman car, steamer state-room, which provide temporary shelter; the commercial laundry, the valet service, and repair shop which care for clothing. For the social debtor person there is the municipal lodging house, the dispensary, the soup kitchen, which perform for needy individuals single services, which the domestic household provides for normal individuals living in families.

Institution households may also be classified by other characteristics, for example, as to whether the grouping of persons is a more or less permanent one, as in an institution for the care of the insane; or whether it is entirely temporary, as in a restaurant or Pullman car. Another classification of household institutions might be by purpose, following perhaps the familiar grouping into institutions with an educational, charitable, correctional, religious, or other purpose.

In modern society, institution households within their own

field of service, are as necessary and normal as is the domestic household for the ordinary family group. Standards for the proper administration of each type of home are needed, and there is developing an educational movement for the proper organization and administration of institution households and for the training of persons to serve as general directors of such households and as specialists in charge of food departments, housekeeping, financial administration and the like.[1] Home Economics broadly interpreted includes the institutional as well as the domestic field.

Social Conditions Affecting the Household

A complete statement of social relationships of the household would be necessary to a full explanation of the economics of the household, including its relationships to the local, state, and national governments as expressed in legal standards adopted and in government agencies that serve the home. Similarly its relationship to all the separate institutions of the community such as church and school, public recreation both community and commercial, formal "society" and other centers of contact for the family group outside the home; also the interplay of industrial influences upon the home; and finally the unwritten laws of social tradition, of present and changing social conventions, which in the case of so ancient and so personal an institution are naturally of the greatest significance. Here we shall consider briefly three of these items of the social environment: (1) Usage and convention of the unwritten social law; (2) the written law of statute book and the government's agencies that serve the household; and (3) industry—all in relation to the economics of the home.

Social tradition and convention and the home.—Economic relationships within the family and of family to community are in part determined by what society approves as

[1] See reports of Institution Administration Section, American Home Economics Association, and *Journal of Home Economics*, 1211 Cathedral St., Baltimore, Md. Southard, Lydia. *Institutional Household Administration.* Lippincott.

good. Is house ownership worth while? American society has traditionally approved it, but in large urban centers, and under certain other conditions it is now challenging this convention. Shall the husband be sole wage-earner outside or shall the married woman keep on wage-earning? Shall parents endeavor to endow their children? Shall children support aged parents? These are economic questions on which the unwritten law of convention speaks more or less certainly, as it does on that other ancient question "Shall a man rule his own household?" For in America equal suffrage has evidently entered the home and that not only for the wife but for children as well, so that the modern family is ideally a democracy with equal rights and equal responsibilities for the two adults and for the children too as soon as they can assume their practically equal position in the family group. The transition from the patriarchal type of family with authority centered in the oldest living male to the modern two-generation parent-child type of family with equality for all as far as practicable, has affected our relationships to income, property, vocational choice and preparation, our standards of living or use of economic goods, and other central economic facts of the household. Our modern social ideal of democracy and equality in the family is a most important determining influence upon economic and financial relationships within the home.

The modern family presents varying degrees of stability, and hence there are commonly distinguished the stable and unstable type of family life, the one maintaining its spiritual unity although its members be separated across the seven seas, the other lacking integrity even when its members are together. This bond in the family is in part an economic matter, but it is based even more on the instinctive relations of family life and the personal attachments growing out of the social associations of the family group. The demand for the stable monogamic family is one of the strong social forces and this family type will obviously render a greater economic service to its members than an unstable family. Moreover, the family group

that plays fair economically and tends toward mutual aid tends to survive, for mutual exertion in securing the common living, the common property of house and its furnishings, the common family purse, the fact of inheritance, the assistance given members in education, in the start in life, in the new home, and in later times of need, all become strands in the bond that holds members together. On the other hand, unjust economic relations in the family are a straight road to its instability if not destruction. The social demand for a stable family life will be found therefore to have results in the economics of the family. Enough has been said to indicate that the economic plan of the household at any time is a result partly of the unwritten, social conventions and convictions regarding the home, and that the economic facts of the home react upon these conventions.

Statute law and economics of the household.—The government touches the economic interests of the household by certain laws which it adopts in community, state and nation, and by the government agencies or services created by law that directly or indirectly serve the home.

Property relations within the family group were in most American states originally determined by the English "common law" or the legal principles developed in court decisions; and these common law principles still hold unless they have been set aside by definite statute laws adopted by the state to establish new principles governing the matter at issue. Thus, by the common law, the person and property of the wife were under the absolute control of the husband, but in most American states statute laws have been adopted providing that husband and wife hold as a separate estate all property owned individually at marriage or acquired individually afterward and providing that the wife's earnings outside the home (formerly the property of the husband) are part of her separate estate. But work done in the home and for the husband outside are still usually his property. The wife's right to enter into separate business contracts, and carry on a business apart from her hus-

band, as though unmarried, is now established in most states. Before marriage, husband and wife can by written contract, a "marriage settlement," settle the exact rights which they shall respectively have in their own and in each other's property after marriage and in property settled upon them by third parties.

It is the legal duty of the husband to support his wife and family, and non-support is usually punishable by fine and imprisonment. The child which by common law was not required to support his needy parents is now so required in most states. The guardianship of the child including various economic responsibilities, originally the sole charge of the husband with power to appoint his successor, is now either his charge during his life time to become the wife's responsibility after his death or, what seems appropriate to the modern spirit, is a joint charge of husband and wife, with the survivor succeeding after the death of either.

Tax laws and the laws of wills, inheritance, and administration of estates, and parts of commercial law such as the provisions regarding deeds, mortgages, notes, judgments, attachments, liens, garnishment, leases, labor laws, laws of liability of employers and the like are all matters of statute law that concern the economic relationships of the household.

There is necessarily a constant remaking of the law to bring it up to date, so that it will better express the standards of unwritten law or new social convictions as they mature. For two generations the liberalizing of laws bearing on property rights of married women and on economic relationships in the family group has been one striking advance in the law. It has, however, proceeded unevenly in the different states, hence a special inquiry must be made as to the present legal status for any commonwealth and further reform is needed in practically every state.[1]

[1] Wilson, Jennie L. *The Legal and Political Status of Women in the United States,* Cedar Rapids. 1912. Bres, R. F. *Maids, Wives, and Widows.* The Laws of Various States as They Affect Women. New York, Dutton, 1918.

Government agencies and the household.—The household benefits by many municipal and other community services, which are discussed later under the social contribution to family income. There have also developed services of the federal and state governments which concern the household, including: (1) The Cooperative Home Economics Extension Work of the Federal and State governments administered by the United States Department of Agriculture and by the state agricultural colleges and represented in about a thousand counties by the County Home Demonstration Agent; (2) the Federal Bureau of Home Economics in the United States Department of Agriculture which is responsible for a wide range of scientific contributions and popular bulletins, the latter known as "Farmers Bulletins"; (3) the Federal Board of Vocational Education with its division of Vocational Home Economics and with its national experts and a director of the work in each state supervising vocational classes and schools; (4) the United States Bureau of Education with its specialist on home economics education. Other Federal agencies that serve the home include: (5) The Children's Bureau, and (6) Bureau of Labor Statistics of the Department of Labor; (7) the Bureaus of Chemistry (in charge of Food Law enforcement), (8) of Animal Industry (in charge of meat inspection), and (9) Markets in the United States Department of Agriculture; and (10) the Bureau of Standards, with (11) its Division of Housing Standards, and (12) the Bureau of Fisheries (experimenting on food fish) in the Department of Commerce; and (13) the Public Health Service, and (14) the Government Savings System, of the Treasury Department.

In every state there are agencies cooperating with the home such as the State Education Department, and State Health Department (often with a Child Hygiene Department cooperating with the United States Government in maternity and infancy welfare work). There are also State Food Departments, State Markets Departments, State Housing Bureaus, and State Libraries in many states.

By such agencies and services the state has taken cognizance of private housekeeping and is extending aid to it.

Industry and the household.—Each household is set in an industrial environment and the state of industrial progress at one time and another has determined rather completely the productive activity of the household. Professor Tryon [1] has given us the picture of the transfer of household manufacture for the outside market to the shop outside the home and we are in the midst of an industrialization of part at least of the household's present productive work for its own consumption.

Looking at the present American household and the industrial world about it, these conditioning facts arising in industry may be mentioned:

First that the household draws on modern industry for the great variety and volume of commodities and services entering our present standards of living.

Next, that industry is so productive that it has reduced working hours and given the family leisure to enjoy its increased real income.

Next, that industry is remaking our practical processes in housekeeping by providing specialized labor-saving equipment for the work of the household, by suggesting standards and methods for this work whether done by housewife or hired worker, and by stimulating managerial devices such as schedules, cost accounting, and budgeting in household practice.

Finally, that industry has taken upon itself the burden of much of the work done formerly in the home, a process which may be described as the industrialization of house work, a process that is still under way and the possibilities of which raise most fundamental questions as to the future forms of housekeeping. This is to be examined in the next chapter.

Obvious evils have also been brought upon the home by modern industry. Among these are: controlled and monopolized prices; the increasing difficulty of securing good living condi-

[1] Tryon, R. M. *History of Household Manufacturers in the United States, 1640-1860. A Study in Industrial History.* Chicago, 1917.

tions as cities grow through the expansion of industry; the enforced separation of many workers from their homes; the social loss through impermanency of home and community relationship when the worker moves about to seek his economic advantage; and the cheapening of quality in products made only to sell for a profit and to be quickly replaced by another commodity sold at a profit.

The other side of these relationships of household and industry, namely the influences that arise in the home and affect industry, may also be stated. The household is an agency that operates to control in part three of the four factors of economic production, *viz.*, labor, capital and the skill of the enterpriser.

Household and labor supply.—The present number of family wage-earners, and the children of present families, their number and their quality, absolutely determine the future labor supply. Labor supply or population is a fundamental economic control of well-being in the nation and the world over. Over-population in relation to resources is the first cause of poverty for which man is answerable. Now man is beginning to control population through conscious ideals as to family-building, and the mechanism of this control is the marriage age and rate and the birth rate. As the world fills up with people it will be harder relatively for every individual to get a satisfactory living, several nations indeed are over-crowded already with resulting low standards of living. New ideals as to the suitable size of family are a direct path to economic betterment for such nations.

The family also controls in large part the quality of the labor unit both in physical quality and in mental and moral equipment to carry a man's economic burdens. As a physical machine the individual worker is rather completely determined by family conditions: first, of physical inheritance and of physical care, both that secured as a child while developing in the parents' home and that secured later by the workman in his own home. The living provided by a family for its workers, the quality and quantity of food, clothing and shelter and

other essential conditions of health—these largely determine physical efficiency. The Panama Canal was dug partly by the housekeeping efficiency of the wives of workers and of those administering dining rooms, boarding houses and the like in the Canal Zone.

The family when it determines good moral standards in the little child, lays the basis for later sound industrial relations—honest work and no skimping or soldiering on the part of the employee, and justice and a square deal by the employer. As women participate in politics and in industry, they will as mothers instill better civic and industrial ideals in their children. Home discussions of industrial problems affect not only children, but men's votes in union meetings and their actions in the shop. The worker as a personality is built partly out of the family fabric. The ability to cooperate with others comes out of family relations primarily and without cooperation there could be no industrial organization.

The family carries the individual until he is ready to go into industry as a producer. The dependency of the minor is the family's problem, not society's, and the minor is not alone carried along but is given the power to carry his family group of the next generation, thus perpetuating the industrial organization and the state.

The preparation for industry through vocational choice and training are functions forwarded by and often largely dependent upon the family of the individual concerned. The family is in a position of vantage to advise the young person wisely, for here are human contacts unbroken from birth to maturity. What the family may lack of the wider knowledge of the vocational expert it offsets in part by the reality of its interest, and its instinctive factual knowledge of the abilities and weaknesses of the individual concerned. With the new and needed professional attention to moral and vocational guidance the home will remain an important factor cooperating with experts outside the home.

The family provides motives for the worker. It is the one

pervasive force that tempers the immediate primary selfishness of all effort. Working for one's family is working for one's larger self. Even the unmarried often work for a family, that of their parents, or their own in prospect. Some one has said that the power of the family motive in production is measured by the difference between the productivity of the steady workman and that of the homeless man of the streets. This, while an over-statement, points to the importance of the driving power contributed to industry by family motives.

The household and increasing capital.—The growth of the capital fund tends to increase wages and raise the level of general well-being, and the savings made out of family income is one of the two great sources of increases in social capital. Private property is one of the prime movers in economic society and it operates in part in and through the family group. Property is accumulated through the family motive as personal property and is held and transmitted largely by family groups. While the principles of family property are just now being modified, as by the graduated income tax and inheritance tax laws, in favor of the wider family of the state, the working relationship of property to the small kin family will remain basic. We work in industry for many reasons—need of self-support, enjoyment of activity, desire to serve, but never for a more real and moving reason than that we wish to care for our family to-day and accumulate property to care for them if we are taken away. Out of this making provision for self and kin through accumulation of property has come in part the growth of the capital fund; and the family's historical and present-day natural tendency to save contributes fundamentally to social progress.

Household and the enterpriser.—The home has also to do with the development of the personal qualities needed for the industrial enterpriser and any increase in the number and quality of industrial leaders is a service multiplied a thousandfold in social benefits. By its combination of freedom and control for the little child the family becomes the seedbed of

initiative, leadership, and the cooperative attitude from which spring personal qualities that, shaped later by playground and industrial activity, become the personal equipment of the business enterpriser.

The household, therefore, directs in considerable part the forces controlling economic progress: quantity and quality of the working population; the increase of capital; and the rearing of men competent to lead. Increased money wages, rising standards of living, more happiness and contentment for the common lot will result in any national society as population is adjusted to natural resources, as the capital fund grows, as the qualities of industrial leadership improve.

The Plan of the Subsequent Chapters of This Book

This institution of the household evidently serves many and varied needs of its members, and as a basis of that service it has varied relations with the social environment in ways that have just been suggested. In subsequent chapters we shall consider the more important economic problems of the household as follows:

The income of the household; the general basis of its expenditures, and a summary of studies of expenditure; the provision for savings for future spending and for security as a first claim on income; and then, successively, the standards and costs that control in meeting the current needs of the household for food, for shelter, for clothing, for housekeeping and for the personal and cultural satisfactions of life. A concluding chapter presents practical methods of adjusting family economic resources to the needs determined by the purposes of family life.

ADDITIONAL REFERENCES

ABEL, MARY HINMAN. *Successful Family Life on a Moderate Income.* Lippincott, 1921.

BOSANQUET, HELEN. *The Family.* London. Macmillan, 1906.

CAMPBELL, HELEN. *Household Economics.* Putnam's Sons, 1907.

GILMAN, MRS. CHARLOTTE (PERKINS). *The Home, Its Work and Influence.* New York, 1903.

GOODSELL, WILLYSTINE. *A History of the Family as a Social and Educational Institution.* Macmillan, 1915.

HOBSON, J. H. *Work and Wealth, a Human Valuation.* Macmillan, 1916.

RAVENHILL, ALICE, AND SCHIFF, C. J. *Household Administration.* London, 1910.

RICHARDSON, BERTHA. *The Woman Who Spends.* Whitcomb and Barrows. Boston, 1910.

RICHARDS, ELLEN H. *The Cost of Living, as Modified by Sanitary Science.* Wiley and Sons, 1900.

———. *Euthenics, The Science of Controllable Environment.* Whitcomb and Barrows, 1910.

SPENCER, ANNA GARLIN. *The Family and Its Members.* Lippincott, 1923.

———. *Woman's Share in Social Culture.* (Author, New York City).

TALBOT, MARION, AND BRECKENRIDGE, S. P. *The Modern Household.* Whitcomb and Barrows, 1912.

XENOPHON. *Œconomicus of Socrates, or a Treatise on the Management of a Farm and Household.*

CHAPTER II

HOUSEHOLD INCOME

The living which a family secures, that is, the sum of satisfactions of its physical and psychical needs, may be thought of as the stream of experience enjoyed by its members. This inflow of the satisfactions of food, shelter, health, recreation, artistic and other needs may be called the real or vital income of a person or family group. After pointing out the difference between this real or vital income and money income, this chapter will examine the facts as to money incomes in the United States and the question as to whether married women as well as men shall contribute money income to the household; there follows a discussion of the net real income which families secure and of the sources from which it is drawn, from inside the home in the sources of household labor, management, and household capital, as well as from outside the home in gainful employments and from invested capital, and from society's contributions as well as from individual effort. The special problems of farm women and of children in relation to income are also considered.

Real vs. money income.—Income is ordinarily thought of as the inflow of money received. This has been designated the money income of the household. Real or vital income, however, refers to the inner experience of gratifications that arise from the use of things and from human services enjoyed.

The economists have a distinction between money wages and real wages, the former being the compensation that a worker receives and the latter the living which the money wages will buy. This living will be determined, of course, not only by the amount of the money wage received, but by the present

level of prices whether high or low, that is, the amount of goods that a dollar will buy, and also by the market intelligence of the one who exchanges the worker's dollar into goods at the store, and still further by the degree of intelligence shown by a given laborer and his family in using the things bought with money and in so combining them as to secure a well-balanced, satisfactory life. The classical distinction between real wages and money wages comes to this, that it does not matter so much just how many dollars are in the pay-envelope, as it does what those dollars actually secure and bring into the life of the worker. Money income is measured ultimately in grains of gold; real or vital income in units of personal well-being. This distinction gives a starting point for considering the real income of the household, but the latter is also based upon other determining factors of the highest importance.

Money incomes in the United States.—How many people receive incomes less than $1000? or from $2000 to $3000? How much is the total of personal incomes available in the United States in any given year? The answers to those and similar inquiries have been recently given in an authoritative study of Income in the United States by the National Bureau of Economic Research.[1]

The Bureau of Economic Research estimates the National income, that is, the sum of all personal money incomes received, at 61 billion dollars in 1918, this amount having increased from 28.8 billions in 1909; [2] this does not include the money value of work done by housewives for their own families—estimated at $500 per housewife in 1909 or a total of 8.85 billion dollars [3] and at $750 per housewife in 1918 or a total of 15.8

[1] *Income in the United States. Its Amount and Distribution, 1909-1919.* Vol. I. By Staff of National Bureau of Economic Research, Inc., W. C. Mitchell, W. I. King, F. R. Macaulay, O. W. Knauth. New York, Harcourt, Brace, 1921, p. 147. Vol. II gives sources for Vol. I, and Vol. III is a study of income by States by O. W. Knauth.

King, W. I. *Wealth and Income of the People of the United States,* Macmillan, 1914, gives income facts by families, and facts as to property distribution.

[2] *Op. cit.,* p. 76.

[3] *Op. cit.,* pp. 57-60.

billions. The National money income estimated at 61 billions in 1918, if expressed as a per capita income for the 104 million people of the United States, is equivalent to $586 per capita in 1918, an increase from a per capita income of $319 in 1909.[1] Much of this increase in National and in per capita income was due of course to the rise in prices and wages in the war; the Bureau therefore presents a table that excludes fluctuations in income due to price changes and shows that, measured in terms of incomes as they were in 1913, the per capita income had increased from a relative figure of $333 in 1909 to an actual figure of $354 in 1913 and that this increased to a relative figure of $372 in 1918, assuming prices for these years to have been as they were in 1913; [2] so the relative increase from $333 in 1909 to $372 in 1918 represents the change in per capita income in respect to its effect on actual prosperity and well-being in the decade.

Per capita income in the United States is higher than in other countries. For 1914, it is estimated that the per capita income in the United States was $335, as compared with $263 in Australia, $243 in the United Kingdom, $195 in Canada, $185 in France, $146 in Germany, $112 in Italy, $54 in Spain and $29 in Japan.[3]

The table herewith quotes from the Bureau's study of income the distribution of personal incomes in 1918 of 37,569,060 civilian individuals then gainfully employed (excluding 2,500,000 soldiers, sailors and marines), and who in that year received $57,954,722,341. Column one gives the range of incomes received by members of the income classes regarding which the percentage facts are stated in columns two and three, (a) as to the percentage of the thirty-seven million persons included in each class, and (b) as to the percentage of the total National Income of nearly fifty-eight billion dollars which is received by members of the class concerned. For example, the third line of the table may be read as follows: Incomes of $500 and more but less than $1000 were received in 1918 by 33.3537 per-

[1] *Op. cit.*, p. 76. [2] *Op. cit.*, p. 76. [3] *Op. cit.*, p. 85.

cent of the 37 million persons employed and this group received 16.94 percent of the National Income of nearly 58 billion dollars.

DISTRIBUTION OF PERSONAL INCOMES IN 1918.[1]
(Excluding 2,500,000 soldiers, sailors, marines.)

INCOME CLASS		PERCENTAGE OF PERSONS (37,569,060.)	PERCENTAGE OF TOTAL AMOUNT OF INCOME ($57,954,722,341.)
Under Zero		.5324	—.22
$0	$500	4.8645	1.18
500	1,000	33.3537	16.94
1,000	1,500	33.2670	26.40
1,500	2,000	13.8999	15.39
2,000	3,000	8.1584	12.62
3,000	5,000	3.6817	8.93
5,000	10,000	1.5646	6.79
10,000	25,000	.5112	4.85
25,000	50,000	.1094	2.41
50,000	100,000	.0373	1.64
100,000	200,000	.0132	1.16
200,000	500,000	.0053	.98
500,000	1,000,000	.0010	.38
1.000,000 and more		.0004	.55
		100.	100.

This table indicates that nearly 5 percent of workers were receiving less than $500 a year; one-third were receiving $500 to $1000; one-third $1000-1500; and 14 percent, $1500-2000. Adding the items together, nearly 86 percent were receiving less than $2000 a year, and 14 percent were receiving $2000 a year or more. By adding percentage items in the third column it appears that about 60 percent of the National Income went to the 86 percent of persons who had incomes of less than $2000 each, while 40 percent of the National Income went to the 14 percent who had incomes over $2000 each. It appears in the original detailed data that the most prosperous 1 percent of income receivers had nearly 14 percent of the total National Income, but this most prosperous 1 percent counting down from the largest incomes includes people getting $8000 a year. The most prosperous 5 percent of income receivers have nearly

[1] *Op. cit.*, p. 137.

25 percent of the total income paid but this group similarly includes all down to people who get $3200-3300 a year.

This income study of the Bureau of Economic Research draws attention to the importance of the contribution made by the housewife to the National Income even though the housewife is not paid in money. An estimate of $500 per annum as the average income of persons gainfully employed in "Domestic and Personal Service" in 1910 is taken as the basis of calculation and this estimate was increased to $750 in 1918, when it had a total value for all housewives of 15.3 billion dollars. In 1918, the National Income of all people gainfully employed was 61 billions, so that the housewives are estimated to have contributed services which if paid on the modest scale suggested would have been equal to one-fourth all money incomes received. In other words they increased the national money income by one-fourth of itself; or of total national income including their contribution they produced one-fifth. This "conjectural estimate," as the Bureau calls it, will doubtless in time be made more accurate, by taking account of different degrees of skill among housewives and also by appraising their managerial contribution to income.

Money income in working families.—The incomes of 12,096 white families dependent mainly upon the earnings of the husband, studied by the United States Department of Labor[1] in various cities during the war showed that as total family income increased from $900 to $2500 the number of families in which the wife earned decreased from 13.3 to 5.4 percent; the number in which children earned increased from 7.8 to 71.1 percent; the number taking in lodgers increased from 2.4 to 6.5 percent; the number securing income from poultry and garden remained about the same (41 to 47 per-

[1] "Cost of Living Study in the United States—Family Incomes," *Monthly Labor Review,* Dec., 1919, pp. 29-41. This study covers white and colored families, but totals for white families are quoted; no families are included in which: children live as boarders paying board and keeping part of their earnings to spend; in which any boarders or more than 3 lodgers are kept; or in which personal earnings are less than 75 percent of total income.

cent); the number receiving gifts decreased from 75 to 70.8 percent; and the number having income from rents and other investments steadily increased from 3 to 23.5 percent.

The percentage of families receiving income from different sources and the average amounts contributed from the different sources were as follows: average for all families, from earnings of the husband, $1349; 8.9 percent of wives worked and earned an average of $163.65; children in 18.6 percent of the families, averaged $479.60 per family; dependents in 0.7 percent of families averaged $284.50; lodgers in 5.1 percent of families paid an average of $108.76; gardens and poultry in 44.3 percent of families produced an average of $26.11; gifts in 73.3 percent of families amounted to an average of $36.42; rentals and other returns on investments in 11.2 percent of families averaged $68.73; and 28.4 percent of families had an income from other sources with an average of $24.02. The total average income from earnings by all members of families was $1454.91; the average income other than earnings, was $58.38; the total average income was $1513.29.

In two hundred and sixty Philadelphia workingmen's families in 1917-18,[1] thirty wives (11.5 percent) were earning income; and in fifty-one families (19.6 percent) there were children earning income, seventy-six children in all being so employed. The average total income per family was $1262.09; the average earnings of wives who were earning were $138.12. The average earnings of children per family where children were earning were $404.10. Of the income received by families, 84.8 percent was earned by husbands, 6.3 percent by children, 5.9 percent was paid in by boarders, lodgers, and others living with the family, and 1.26 percent came from earnings of wives and the balance, about 1.74 percent, came from contributions of other members of the family and from miscellaneous sources.

Who is to earn the money income?—Experience indicates the wisdom of relying exclusively upon the man as

[1] Beyer, W. C., Davis, R. P., Thwing, M. *Workingmen's Standard of Living in Philadelphia.* Macmillan, 1919, pp. 30-33.

money-earner; the children to be freed from earning until they are at least fourteen or sixteen years of age in accordance with the child labor laws (or better, as the newer standards are suggesting, eighteen years); and the woman to keep free from wage-earning after her marriage, or at least from that time until her children have attained their majority. The normal standard is: the husband supporting his family by outside work for money, the wife supporting her family by serving inside the home and creating wealth there. The argument sometimes heard that married women wish to work outside for wages, instead of pursuing traditional household employment, is based upon the experience and attitude of a limited group with extensive training, or wide social contacts, part of whom feel a call to continue outside service and part of whom are led by economic opportunity to serve in terms of their special qualifications.

The only safe rule as to whether the married woman shall remain as wage-earner is, freedom for the individual to decide what seems best, but to do so in the light of her responsibilities. There is to be pointed out first, the need of the individual adult man and woman to have intimate and continued contact with the child; the need of the individual child to have its own mother as nurse, both physical and mental; not less important, the response of the woman to the child's need, so that one may say that the mother needs her child as much as the child needs its mother. Finally, granted that there be a home and the mother in it, the economic fact is to be recognized that there is an opportunity for income-producing in the home through housework as discussed below, an opportunity, which for all but exceptional women, is equal at least to that of outside wage-earning.

It may be said that housekeeping and homemaking is a full-time vocation providing scope for the best that any woman has. Nevertheless the rule of the home as sole vocation for the married woman may in certain cases be nearly as absurd as would be an obligatory rule that the married woman must continue at wage-earning.

Individual exceptions of married women who more or less successfully combine a gainful outside vocation with housekeeping, homemaking, and child rearing are, however, sometimes accepted as proof that forthwith the old-time home is to be done away with, all housework is to be industrialized or transferred to the shop, and all married women are to be gainfully employed outside the home. But no such outcome seems likely. The double vocation for married women concerns first the occasional highly trained woman who with professional zeal wishes to carry on in her vocation, and second the woman under economic pressure to earn. Housekeeping and homemaking are too demanding a task in the needs of the child and of the family, too interesting in their variety and freedom, too productive of values by which the family benefits, to be dropped for the lure of eight-hours a day and the pay envelope. The industrializing of house work or its transfer to industry is facilitated by the common industrial experience of women in gainful employment, by the gradual progress of mechanical invention of household aids and by the progress in business organizations that provide service to the home.

The housewife by her presence in the household creates a personal product, home life, as we know it, in addition to her objective contribution in housework. If an economic reorganization of the household were to take the house mother into outside employment in order to earn more to help secure economic goods for the family, her family would lose a part of her present social product in the home that is most highly prized.

Household Real Income

Our consideration of money incomes and who will earn them has not raised the ultimate question of the real income enjoyed by the family and its sources.

Net real income.—The real income or the flow of satisfactions secured from economic goods and services is evidently an important measure of life, but a more important measure is net real income. Net money income in business means money

gained less money paid out—it measures business success. Net real income in living means the net experience of satisfaction—that is, the satisfactions of living and working, less the dissatisfactions of living and working. As a net amount how large do the satisfactions of life bulk above the dissatisfactions—this is the measure of real success in the household.

If one thinks of units of satisfaction (primarily from consumption but also from well-ordered production), and of units of dissatisfaction (primarily from production but also from ill-ordered consumption), then one can use the following equations of net real income: the units of satisfaction minus the units of dissatisfaction equal the net real income; or the experienced utilities from consumption (and production) minus the disutilities of production (and consumption) equal net real income.

In terms of these equations personal or family real income and the degree of well-being experienced can be promoted either by increasing the "vital" or experienced utilities secured from consumption or by decreasing the vital costs of production.

How much of a living do I secure as a net residuum of economic relations, is the question at issue. The home, as the institution of consumption and the place of productive work for half our adult population, is a large factor in the answer of how to increase net real incomes. It is not over-estimating the situation to call it the most important single factor controlling this ultimate question of well-ordered living and of the net real income.

Factors in real or vital income.—The sources of real income in the family can be found by examining the satisfactions secured and tracing them back to their sources and then classifying the sources on an economic basis. In the daily experience of household living the human needs that are met run the whole range of human nature—hunger and its satisfaction, the craving for family association as husband and wife and parent and child, the desire for social, for religious, for artistic contacts, the demand for health, for recreation, for per-

sonal progress and all else that the physical, mental and social qualities of man demand. Such a list, varied and extensive as it is, can be brought under the two economic classes, first of economic goods or commodities, i.e. things of use in meeting human needs, and second of economic services, i.e. human contacts useful in meeting such needs.

The economic goods and services which a family secures and which comprise the real income of that family bottom themselves upon something more than simply the economic services of the man of the family outside the home and the wages or other money-income that his services secure, important as they are. A comprehensive view of family real income shows at least three general sources:—the economic contributions made by members of the family or by family property, securing *money income outside* the household; the economic *services rendered inside* the household which create wealth there for family use; and the *social contribution* both of material and of service made by community and state to the family's living.

The economic sources of family income include money income, household production income, and social income. There are three types of money income: (1) *Outside labor income,* or the money wages and salary, and rarely goods secured by the paid routine service of members of the family outside the home; (2) *outside management income,* or the money profits secured from the business leadership of the proprietor or owner of a business enterprise who renders unique service as the business organizer, particularly as the business decision-maker and risk-bearer, and who is compensated by business profits and who also bears business losses; (3) *outside investment income,* the return on invested funds, which takes the form of interest on capital put into bonds, notes, etc., of dividends on capital in stock, and of rent on "economic land."

All three outside sources are alike in this, that they bring *money income* into the household for its use; the first two are alike in that they usually represent the personal services of the man of the family outside the home, and occasionally other

members of the family similarly; the third type or investment income, is often money secured from invested family savings, in the creation of which the woman of the family may have had a share equal to that of the man.

Household production income is also of three types: (1) *Household labor income,* or the goods and services created within the home by the non-wage-earning productive services of the housewife which enter no market but are for the use of the members of the family and become a part of their living. To some extent other members of the family contribute similarly to household labor income. (2) *Household management income* comprises the advantages accruing to a family from wise planning, organizing, and administering of its affairs or from what the economist calls the decision-making functions of the enterpriser at the head of an undertaking; this enterpriser service in the household, performed primarily by the housewife, but to some extent by the husband, is to be distinguished from merely routine household labor because of its character and its contribution to the living. Like household labor, while uncompensated in money, it makes its direct contribution to the family living by creating greater satisfactions for its members. (3) *Household capital income* comprises the immediate services of those items of permanent capital goods, both productive and consumptive, which the household owns and itself uses in its own work and living. This includes the use of the home that is owned, and its working equipment for household production such as range and washing machine, and similarly its furnishings for consumption such as chairs, pictures, rugs, etc. This income item might be called *household use income* since the services of household capital are used immediately by the household concerned without passing through markets or a money medium.

Of the three types of inside income, the first two, household labor income and household management income, arise through the unpaid personal services of the housewife devoted to the immediate well-being of her family, and to some small extent

through the similar services of husband and children. The third type of inside income, household capital income, arises through saving and investing—in which the investment takes the form of the purchase of permanent capital goods for family use rather than investment for money income—and includes capital used in the processes of household production and of family consumption. In creating such capital husband and wife may cooperate in the saving process though the responsibility for investment in household capital seems to belong primarily to the woman.

A final type of household income is that secured from the use of social capital and from social services rendered by the community, state, and nation. *Social use income* or the satisfactions secured by the family from socially owned property, such as parks and libraries and from social enterprises and services such as education, community music, and community health work and the like, is an increasing factor in the living secured by the modern family.

The form of money income.—The family may receive money from outside labor, as wages, salary and the like, from outside management, as business profit, and from outside investment as interest, dividends and rents. Is it a matter of moment to the family life, whether its money comes as wages or profits or interest? The profit-seeker is apt to be a progressive, energetic person, zealous for business success. So far he is likely to bring stimulation and broadening factors into the home circle that are good for its members; his income, however, may be uncertain, depending on varying business conditions that fluctuate and this renders the financing of the home on profit-income a more difficult task, since some scheme of equalizing lean and fat income periods is a necessity. Income from wage or salary has the advantage of regularity. Further, its receipt in return for regularly rendered service in the outside world, and the knowledge that it stops instantly when the service stops, gives a tonic quality that makes for sound economics among the young people growing up in the home.

The importance of this psychic quality of money income is evident when one considers money income from investment, especially from property long since accumulated or inherited—it conveys, unfairly perhaps to the observer, but to its recipient possibly, and quite likely to the child of its recipient, the idea of "something for nothing." Where investment income is a result of the personal thrift and good management of those receiving it, it carries no economically stupefying influence. Income source as well as amount of income, may therefore exert an influence, good or bad, on family life. This fact suggests that parents make plain to children the importance of vocation choice and preparation in relation to later income, the possibilities of the skilled trades and profit-making vocations, the relation of service rendered to income received, the place of thrift and the importance of some income from accumulation, and the anti-social effect of accumulation so large that work seems no longer necessary, and in other ways give simple economic training in matters connected with money income.

Outside labor income—wages and salaries.—This designates the current wage or salary received by members of the family engaged in routine outside employment, exclusive of profits earned for service as a business leader, and exclusive of returns on capital invested. The household is particularly interested in the amount of such remuneration and the conditions that determine the amount; in its uninterrupted flow into the family purse; in the personnel of its wage-earners, whether the man serves exclusively in this way, or whether other members also work for wages; in the conditions under which wages are earned, and in the possibility of increasing the wage-income as the needs of the family increase.

The family should come to realize that wages are adjusted in proportion to the product that the worker contributes, or approximately so, and that an increase of personal product or output is the surest route to increased pay. So, the family will give its children all the general and vocational education

possible and will continue the education of its adults beyond school age. In choosing their vocations, it will select vocations where supply and demand favor good wages. It must come also to appreciate what are the basic economic forces that control wages, namely—the ratio of population to available natural resources, to the country's equipment of working capital, and to the quality of available business leadership.

The family must realize that wages or labor income is to be determined by the market conditions, not by direct legislation, except when necessary to protect a defenseless group of children or workers at a sub-standard wage. Law can establish, by a minimum wage, a plane below which wages shall not be paid and above which competition shall be free to determine wages; but direct wage legislation like direct price-setting legislation, is apt to confer bounties on one group of workers or sellers at the expense of others.

The family must realize the importance of group bargaining in determining wages. It can render the greatest possible service by insisting that the family spirit of good-will and cooperation be adopted in industry between employers and employees.

Continuity of employment can alone give continuity of wage income to the household. Unemployment has been due chiefly to the following causes: Sickness, weather, accident, old age, inability to get work, slack work, closing of establishments, strikes, vacations, lack of materials, and business depression. Most of the causes of unemployment require cooperation between society and the individual for their removal and in nearly all of these the household can assist. Intoxication, general foe of the household, as well as of its money income, will become less frequently a cause of economic distress as government prohibition proceeds. Business depressions that throw men out of work, so far as they are financial or banking crises, will doubtless be greatly reduced by better legal standards as to banking, particularly by the operation of the Federal Reserve banking system; and so far as they are business cycles,

they are on their way to be understood and in time partly, at least, controlled by forecasting depressions and taking economic measures to reduce their severity, as for instance by government work in time of depression. Loss of income due to labor disputes may be reduced by industrial organization for group bargaining, and by a better organization of industry. Much unemployment by seasonal industry can be reduced by dovetailing seasonal trades by workers and by combining supplementary seasonal industries by employers. Industrial disease and accident no longer stop the income of the individual affected where compulsory accident insurance is carried by employers, and the proposal to provide compulsory health insurance that will give benefit in all cases of worker's illness may reduce the evils that flow from that important cause of unemployment. National organization of employment intelligence by government or other agencies, such as we had in the war, will help bring the job and the jobless together. Unemployment of the ne'er-do-wells, the shiftless, the inefficient, those who have no physical energy or mental power to work may be in part reached ultimately by cutting off lines of heredity that carry weakened stock, and as an immediate program, in some cases, by adequate feeding, etc., to give normal physical condition, or by stimulating some productive power by vocational training. The handling of family finance so as to create a small reserve fund to carry through unemployment emergencies is also an important safeguard. In this connection the detached home with land about it for a garden affords a temporary productive vocation for the man at home. Other recommended measures in time of unemployment are: part-time employment for all, rather than full-time employment for part of a given group of workmen; relief employment for jobless husbands rather than wives who have ordinarily been at home; industrial training with scholarships for the unemployed; relief employment to be at standard rates but for part-time to encourage return to regular employment. The unemployment of old age may in time be met by some social

insurance program. It certainly can be more efficiently met than at present by better organized private and family thrift. The home bears the burden of unemployment and it may be a double burden—nothing coming in and sometimes unusual expenses connected with the cause of absence from work, as in illness. The home is one center of important influences that are tending to reduce unemployment—by increased intelligence as to the care of self and family, by health education, by social insurance, by thrift, by better organization of industry and of business to reduce unemployment and to meet it when it occurs.

Outside management or profit income.—Money incomes in the form of profits are secured by those families in which the money-earner works, not for an employer for a contracted rate of wages, but on his own account, with attendant risks and with possibilities of larger as well as smaller gains. While the relatively large incomes belong here, being based especially on profits, many small-purse people derive their money income from profits, which arise in humble enterprises like those of the shop-keeper, the small farmer, the peddler, as well as in larger undertakings.

The family living on profits needs to realize that profits will vary in different years—and in different seasons of the year; that all profits secured are not available for the family living, since part must often be reinvested to safeguard, if not to increase, the business; that to secure a good return in the form of profits is a matter of growth, so that while a small income may be available now, it may be expected to increase later, provided the family will restrain its spending now so as to make the increased investment in the business as large as possible. Profits will vary with general business conditions, and with conditions in the particular division of trade—both of which are beyond individual control; but primarily, profits vary with the initiative, ingenuity, leadership, and judgment of the man who is seeking profits. Some of these qualities the home can reinforce by encouragement, by affording a silent

partner with whom a matter can be talked over. In small businesses, members of the family often work in with the father and help win his success. One real question concerns how far the home's interests shall give way to business interests—there is a danger here, not present in the wage-earner's family. Shall the purchase of farm-home equipment, for example, be postponed to buy farm machinery? It often is postponed, and frequently for too long a period. The danger can be lessened by a common understanding between man and wife that the better life for the family group is the ultimate good (not business as such), and that this must be promoted by better living conditions now as well as the better business equipment that may give better living conditions later on.

Outside investment income.—This designates money income in the form of interest, dividends and rents received on capital or land owned and put out to hire. It results not from present personal service rendered, but presumably from some individual's earlier service which secured an income that was funded as an investment; or, the investment may have been secured by inheritance, gift, or other chance circumstance. An explanation of investment is that out of current income the recipient, instead of consuming all, sets aside part and "saves" it, and this consumer's "abstinence" from consumption is the source of accumulation. Like profits, investment income is usually received irregularly since it falls due on certain dates only, but any considerable investment may be divided and placed in securities and other forms so chosen that the income will be received in amounts and on dates as desired. The value of the investment or property itself is, of course, to be distinguished from the annual income received from it.

The investment itself may be funds on deposit at interest in a bank and available at will, or it may be a loan as on note, mortgage, or bond receivable at the end of a period; or it may be ownership as of rentable real estate, or stock ownership. The importance of some family income from investment to supplement other money income from wages and profits can

not be over-emphasized since it continues regardless of whether the recipient is able to work or not, or whether his business is successful or not, and is thus a steadying factor in the income situation. Especially desirable is a growing investment income created out of one's own thrift and saving, provided it has not been at too large an expense of one's present standards. The family should remember that investment income is sometimes not much more secure than the individual's own wage or profits income, since in turn it usually depends upon the regularity of some one else's business earnings. The principal or capital value of many investments and the annual income of many investments are fluctuating sums, so that the certainty of investment income must be accepted with a reservation.

Investment for the family is discussed further under savings.

Contingent or chance money income comprises those receipts of money other than current money and investment money income—such as gifts and bequests. It is a good practical rule when such money is received, to treat it apart from current regular income, not to use it for current needs, but to add it to one's personal capital. Two or three particular types of money gift may be mentioned as of importance in the household: gifts to children and young people, wedding gifts, and bequests. Gifts to children are most widely added, in whole or part, to a savings account to be held as the education or start-in-life fund, built up out of the child's gifts and later earnings. The giving of money as a wedding present is a desirable custom, as it helps provide the young couple with their initial household or other outfit, while leaving to them the freedom of choice which if desired may take the form of an invested reserve fund. Bequests from decedents to relatives and friends are a special form of gifts and are usually best treated as special additions to capital, and held for their investment income.

Money gifts wisely given to young people, and the fair division of estates by equitable bequests to immediate relatives (as well as by bequest to friends and for social purposes) are

two financial practices affecting family income that can well be encouraged among our people. The danger from gifts and bequests is that of stultifying ambition by the receipt of something not earned, and in the case of large amounts, something that makes future earning by the individual unnecessary. The general law of economic income is that he only receives who serves in some economic relationship, and that the income received is an approximate measure at least of the service rendered. Gifts come as an expression of affection, not for economic service rendered; money gifts are wisely given when conditioned so that they stimulate a sound economic reaction in the receiver, a tendency toward activity and self-reliance rather than indolence and dependence.

Household labor income.—Household labor income comprises those additions to family well-being through routine household tasks performed by members of the family which provide material commodities and human services to meet the immediate needs of different individuals in the home. Doing for yourself and your family, or self-service, evidently frees money that might otherwise be required for hired service. It secures a result which but for the contributed labor of family members could only be had by hiring an outsider for money. The money freed by the family's household work is thus available to use for some other need and so the family satisfies a wider range of its needs and secures a better quality of living. The satisfaction obtained from the product is the same whether we do for ourselves or hire some one to work for us—something is achieved that adds to comfort, and satisfies a want. The non-monetary contribution of working for self or family is to be counted in, when one sums up the flow of real income or satisfactions secured. That is, one part of real income comes by way of commodities and services purchased by money secured outside the home; another part is created by one's own productive efforts and those of other members of the family within the household. Household work adds to the real income available for family use.

The household is full of examples of real income increased by self-service. Self-service also enters interestingly into some commercial situations. The automat lunchroom where the customer puts in a nickel and takes out a sandwich, the cafeteria restaurant where he fills and carries his own tray, the cash and carry grocery store, the clerkless self-service grocery store, are devices to use the consumer's own labor and have proven to reduce costs, or to increase the product secured over what would have been possible had all labor been hired. Self-service instead of hiring service is the rule in the home.

The contribution through housework varies with the managerial skill with which these self-directed tasks are planned and executed. Hence what the housewife as worker contributes to the family's living may more accurately be said to comprise two factors: first, household labor income, equivalent to what an undirected employed houseworker might accomplish in the same circumstances; and, second, whatever surplus beyond this the housewife contributes because of greater managerial skill and better self-direction, and this may be regarded as part of household management income. (See below.)

The forms of household labor income may comprise: (1) a relatively complete productive process as in the preparation of foodstuffs, from the keeping of poultry or making a garden to the cooking and serving of the foods resulting for the family; or more commonly (2) the last steps in a production process the earliest ones of which are carried on outside the home, for example, the broiling and serving of a steak; or (3) a household process of renewing values that have been impaired with use, such as the washing of dishes, or laundering of clothes and (4) the work of management in the home which is not accurately "labor income" and is described under management income below. The productive work of the home like the production of outside industry comprises the creation of economic utilities, and these comprise utilities of form, of time, of place, and of ownership. Productive housework is thus as varied and comprehensive in its character as are the productive processes

carried on in office, store, shop or on farm. Here lies the proof that housework creates income.

The addition to household income by housework is in the utilities created within the house and consumed there. Mere activity does not increase income, for example, the making of useless embroidery and over-refinements in care of person or house. To be income-increasing there must be a valid need met; yet meeting by self-service what seems to me a valid need, adds to my real income even if it does not meet another's approval.

Whoever does a necessary and useful thing about the home increases the family's wealth and well-being. Household labor-income arises, therefore, in connection with every member of the family who carries any small task or contributes any service that meets his own or another's need. We are in the home right in the midst of the consumption process and the "work" need not be expressed in some material product, it may appear only as a fleeting service rendered—a question answered, a word spoken, a wound dressed, medicine administered, or a game played. Household income is increased, for example: (1) by each member taking responsibility for his own personal property, as clothing, toys, etc., as regards their care, storage, order; (2) by similar responsibility for one's own use of common family property as magazines, books, by replacing after use; (3) by special tasks which individuals undertake, as a boy's care of the furnace, or man's supervision of plumbing; (4) especially is it increased by the housewife whose performance of housework is her normal contribution to the family income.

The value of household labor income is best measured by the cost of substituting hired service of equal skill for the unpaid tasks performed by the family, particularly by the housewife. Expressed in money, it will evidently vary with local prices for household service. To make the comparison fair, one can best consider the usual compensation of the working housekeeper rather than of the servant. If a housekeeper

gets fifty dollars a month and room and board and if the latter are worth fifty dollars a month, as they are in cities, then the working housewife is adding a minimum of one hundred dollars a month or $1200 a year to the family's income by her unpaid labor contribution, not counting her management contribution. Even in remote rural districts the amount will be at least half this.

Another measure of the housekeeper's worth might be had by estimating the detailed number of hours given to the important services of the home—cooking, child care, clothing repair, cleaning of house, laundry, etc.—and finding the cost of substituting specialized workers for these tasks at the local wages of such workers—so much for so many hours' work by a cook, so much for the sewing woman, and so for others. While this gives a larger money value for the wife's services, it is not an inflated value where she has real skill in the varied tasks. Another method of estimating the value of the housewife's services is reported by Mrs. Abel who tells of a family that determined the value of the housewife's services by trying boarding for a time and comparing its costs with those when running their home. They found that her work saved the family at least six hundred dollars a year.[1]

It will be objected that a complete substitution of a hired worker for the mother is not possible; that the housewife does some things that others cannot do. Granting that the suggested comparison is but partial clears away this objection, and the total value contributed by the wife may be assumed to exceed these estimates.

The value of the housewife's labor income grows as there are increased demands upon her and shrinks as demands are lessened. Both changes are taking place. Some old tasks, as raising foodstuffs at home, baking bread, laundering, are being abandoned as organized industry and agriculture take over and industrialize housework, but also, there is a growing demand for

[1] Abel, Mary H. *Successful Family Life on the Moderate Income.* Lippincott, 1921. Chapter 8.

higher standards for the old household tasks that remain in the home, and new tasks particularly in connection with the development of the personal life of the home are being laid upon the housewife's shoulders. These changes may be expressed in part by saying, that while housework is tending to decrease through its transfer to outside industry, homemaking responsibilities are tending to increase through an enhanced value put upon the personal relations of the family group and upon its social contacts, for which the mother is responsible. Standards of living in America are gradually rising. The standard of personal and house cleanliness demanded by modern hygiene is higher than that of a generation ago; the house and its equipment are more complete and rationally should be; diet is more varied, clothing is used in greater variety; the ideals of family life call for personal oversight of the child by the parents, especially by the mother, so as to give the child freedom but also direction, rather than "discipline and control." These new standards, and the development of the democratic spirit in the home and its social relationships—all these demand time, are legitimate needs of present day life, and mean that the housewife has duties aside from mere housework, that challenge her best efforts.

On the whole the housewife's contribution to the family's life was never greater, measured by the cost of substituting hired workers for her, than it now is. Although there have been times when she produced more for outside markets, the housewife probably never contributed greater values for the immediate use of her own family; only these values are now in part personal services rather than commodities and so are not as obviously "productive" as was the output of the old time domestic loom and dairy.

Suppose household labor income were to decrease through the rather complete transfer of housework to outside industry, then some of these results might follow: For the man of the family it might mean losing his hard-won leisure in order to increase his earnings to meet the increased costs of buying the

entire living, in which case it would upset the present rather equitable division of burdens between husband and wife. For the woman, it might mean seeking in outside industry to earn in money the equal of her former product in housework; or if wage-earning employment could not be had, it might mean holding back these tasks within the home for lack of means to buy the factory product—like the present case of the woman who washes because she cannot afford to patronize the commercial laundry; or, if family money income were sufficient, and she felt no call to vocation, it might mean idleness and undigested leisure and parasitism for the woman who did no productive service but found in matrimony a trade. As to the child, it would mean fewer children through delayed marriages and a restricted birth rate. It would tend toward increased child-care by institutions, or nursing services for small children, day nurseries and the like, since many mothers, who formerly were able to care for their children by combining productive housework with the child-care, would now be forced into industry to help support the family. Hence poorer standards of individualized child-care would prevail. It would mean new pressure for child labor to make the child productive as early as possible.

Household capital income.—This may be described as the sum of satisfactions contributed to the family's living by the house and its site, its working equipment, and its furniture and furnishings, so far as they are owned and used by the family.[1] If a family have five thousand dollars invested it will yield say 6 percent or three hundred dollars money income per year which will purchase certain satisfactions, items of

[1] One factor described as household capital might more accurately be set apart, namely, the land or natural situation included in the housing site; and its contribution to the living could be similarly described as household economic rent; but for our purposes here the distinction is not important between man-made capital, which tends to yield a uniform return as "interest," and the gift of nature, different parcels of which are endowed differently, and so bear permanently different economic "rents." Both are secured practically by an investment of capital. Under urban conditions, land sometimes depreciates as capital always everywhere depreciates, although in growing communities land usually appreciates in value.

real income. If the five thousand dollars is put into a house and its furnishings, it yields satisfaction or real income, directly, without intervention of a money medium. The annual use of the owned house and its site, of household working equipment and furnishings, is to be regarded as a true item of family income, and is here described as household capital income. The annual value of such property owned and used is certainly not less than what one would pay in rental to secure the use of similar goods owned by another. The property described would rent for say 12 percent of its cost, or six hundred dollars a year, so that by giving up a money income of three hundred dollars one secures a real income of house use that would cost six hundred dollars and apparently an income increase of three hundred dollars is affected by changing money into use goods. There is an annual depreciation in the value of the house and grounds, however, to be first allowed for, and that we may put at one hundred dollars a year for repairs and diminishing value; and also a tax charge of perhaps another hundred dollars a year, hence the use income of the property owned has a net value of four hundred dollars (six hundred its rental value, less two hundred dollars for depreciation and taxes which the owner, whether user or lessor, must lose). This four hundred dollars, contributed to real income by property owned and used, may be all called "household capital income," or it may more accurately be said to be comprised of two parts—the return on capital which the amount of money would have made as a pure investment in funds, say three hundred, and the net surplus of one hundred secured by wisely placing it in use goods. The former, the equivalent of what the same investment would secure anywhere, may be called "household capital income," and the increased return, due to placing it in household property and giving this suitable management, is a part of what we shall call "household management income" since it is an increased return on capital due to changing its form from money into wisely chosen types of goods for the household's use.

Household management income comprises the increase of satisfaction in the home secured by the wise management of those responsible for the home. It is a surplus from the wiser use of either labor or capital or both. A hired worker in the home will provide a certain quantity and quality of satisfaction for the family, but the working housewife produces much more; and so the woman who does her own work may be said through her own labor to create an amount equal to that of the hired worker and also a surplus above this. What she does equivalent to what a hired laborer would do may be called "household labor income," and what she does more as manager of her own labor, through added interest and intelligence, may be called "household management income." Or in a household where all work is hired done, one may imagine what the workers would do for the family's needs if they worked without direction. Whatever additional satisfactions are secured from them may be credited as part of the contribution of the mistress of the house in the form of household management income.

Similarly household management income includes all the surplus satisfaction received from the family's investment in household capital goods (the home, its working equipment and its furnishings for immediate use), compared with the satisfactions which would have been secured had this investment instead been put out at the average rate of interest and its money income turned into real income or satisfactions secured by purchase or rental, rather than ownership. The surplus satisfactions secured by ownership are to be ascribed to the management function in the household which has more or less wisely changed money for goods to be owned and used, and this surplus is part of the household management income.

In business, land gets its rent, capital gets its interest, labor gets its wages, and management gets the surplus called profits left after all the expenses are met. Similarly in the household, land and capital create an income which we have called household capital income, and this we have made equivalent to the

average return on capital of an equivalent amount put into other average investments. Similarly the housewife, as worker, creates an income of satisfaction equivalent to what an average hired houseworker would create. But there is normally in the household a surplus of satisfactions beyond the results of average labor and average capital, and this surplus arises through household management, and is the return to the husband and wife for undertaking the enterprise of managing a home with its various risks and its constant problems arising for solution.

Management income compensates for risks and decision-making.—It is an economic principle that he who ventures—wisely—wins; and marriage and the establishment of a new home and its continued administration is as good an illustration of this principle as launching a new stock company and its continued operation. The housekeeping enterprise involves risks but successful meeting of them brings household success. In business, one takes for granted the responsibility of other parties, one's own ability to predict in part at least future conditions, and one's ability to accomplish the ends set. Business risks wisely incurred are paid for by profits; those not wisely undertaken are penalized by loss—loss of temporary profits, a season's loss for the farmer, or entire bankruptcy sometimes.

Housekeeping and homemaking are a process of risk assumption by the two partners: risks as to each other's business qualifications, the woman may be a poor housekeeper, the man a poor income producer; risks taken by each as to the personal qualities of the other partner; risks of interruption to work—by accident, by illness; uncertain liabilities of the future—as regards children, and dependent relatives; loss of property; desertion it may be or even divorce; State's prison; what not?—what a doleful list one could conjure up out of the real experience of other human beings. There they are—possibilities at any rate and hence "risks"—and the economic law is that those who undertake risks wisely are compensated. Facing such perplexing problems one would pray for wise

judgment in making decisions; and it is indeed in choosing, in decision-making, that the management function expresses itself, and creates for the family the surplus of satisfactions which we have called the household management income.

What are the decisions which the housekeeping partners have to make? There is the initial decision whether or not to marry; and then, shall it be soon or only after years? Shall the start be on a small scale or shall they wait until a higher initial standard can be set? Shall the wife go on working outside, or become vocationally a home-worker? Shall they board or keep house—in town, suburb, or the country? Then every division of the housekeeping is to be explored and guiding decisions made—as to the house, food, recreation, religion, and all the rest. No less on the personal side of the situation, questions must be answered—as to the constitution of the family group, its increase by children born or adopted, the relation of relatives and all others to it, as in hospitality, in religious, fraternal and other groupings, and a score of other contacts. In these decisions, it is not too much to say, resides all possible success or failure for the particular family. If they do meet all this, on the whole, satisfactorily, it is because on the whole wise decisions are made. Therefore the management function of the husband and wife is to have high credit for success. Economically speaking, a large part of the real income of the family, its flow of satisfactions, its measure of happiness, is to be imputed to the successful operation of this management function. The contribution of household management income is a large one. It is based on risks successfully taken, and on decisions wisely made.

Housewife as income producer.—There is an important significance to the money value of the housewife's work. The wife's unpaid services as routine worker and as house-manager are, for smaller and moderate income families, often worth in money an amount not less than the money income contributed to the family's living by the husband's outside employment. Whether equal or not, the two contributions are alike

in that together they carry the costs of maintaining the home. The housewife can therefore feel herself to be equal to her husband in the economic support of the home, and he should rightly esteem her worth on that scale.

"Economic independence for women" has sometimes been urged as a necessity for the sake of personal dignity and the argument usually turns on the thesis that married women who become outside wage-earners are made economically independent thereby.

The detached wage-earner with no one in personal economic relation with him may doubtless be defined as economically independent. But certainly no one partner in a marriage, whether man or woman, can achieve that dubious state of independence; and the married man or woman, the one working outside for money, and the other working inside the home without wages, are each as truly independent in the democratic American share-equal type of family, as they would be were each to be working outside for wages, and then with combined wages buying living accommodations in whatever way they could get them. In the democratic home, where the woman contributes her labor and management to the living, and the man contributes his money, and where all factors of money, expenditure, standards, labor, results, are made matters of joint control and a common living, then there is precisely the same degree of independence for the man as for the woman, and vice versa. One might as well talk of the economic dependence of the wage-earning man who must turn to his wife to take his money and transmute the raw materials it buys, by her productive work, into final stuffs ready for eating and wearing and using, as to speak of the wife's economic dependence upon her husband. Both are equally independent and equally dependent—upon each other; and the outcome of their economic partnership is that each gets a better living than they ever could get individually. "Economic independence" as a battle cry has helped men and women alike to study their situation, but the married twain already have an economic independence

wrought out together. Only they need to appreciate it, and putting a dollar mark on the housewife's unpaid services in the home as hypothetically worth thus and so much to replace by hired workers, helps both to get a fairer view of their economic relationship.

Social income of the household.—The community makes a definite contribution to the real income of every member of every family in the free use of various commodities such as pure water, clean streets, and the like, provided at the public expense, and the free or partially free service of public officials. This contribution varies at different stages of civilization, and under various types of government. There are wide variations in different communities at any given time as well as between different nations. Social wealth and group service have aided the family group from primitive times. Our present attention to civil service, community service, community recreation, public education, public health, social welfare, and a hundred other social programs is due, among other causes, to the recent growth of large cities, to democracy in government that makes us, theoretically at least, responsible for the welfare of others, and to an acceptance of the evolutionary theory that we can set up goals for society, and by common effort reach them. These programs, if even partially achieved, mean an increased efficiency in the present services rendered the home by outside agencies, and they mean a large increase in the number and variety of services to be rendered the home in the future.

Sources of social income.—Some items of social wealth are gifts of nature—"who owns the mountains?" Rivers, harbors, forests, undistributed public lands and the like belonging to all the people, acquired by them originally, without specific cost, make contribution sometimes directly, more often by indirect economic routes, to the welfare of the individual family. Some public property long since acquired by public purchase gives its annual usufruct or use value to the citizen without present costs except for maintenance. Such is the

case of municipal parks. Their cost has been "written off" and they have become like the preceding group. Finally, there are public services paid for each year out of the current year's tax levy. Such is the case with the schools, health, police and similar services. Public services are evidently expansible; as has been said, the family budget is an adjustment of expenditures to available income while a public budget is an adjustment of income to expenditures by changes in taxation. Privately we cut down our spending to fit our income; publicly, we increase the tax-created income in order to provide what we have decided to secure through public agencies. Control, or budgeting, is important in both cases.

Who pays for social income?—The taxpayer usually pays but not always in proportion to the individual benefit for taxes tend to be levied in accordance with ability to pay, and government services are usually rendered in accordance with need. So far as the family pays in fees an approximate equivalent for the cost of the service, government service is purchased, as are other items in the family's budget, by paying a price equivalent to the service. This is the case with postage and with municipal water rates. In this case the group way of securing a service does not relatively increase or decrease the family's cost of living. However, so far as the principle of taxation according to ability to pay is the basis of supporting public service, the service rendered is really a way of distributing income which increases the income of families of smaller means at the expense of those with larger incomes. It is a slight move in the direction of reducing the widest variations in incomes. How far such a tendency may go is observable in the Federal Income tax law under which family incomes under twenty-five hundred dollars ($2500) are untaxed, those from $2500 to $5000 are taxed 4 percent, with higher rates for larger incomes up to 50 percent for that part of net incomes over two hundred thousand dollars a year. Yet all families share equally in the benefits conferred by federal services, unless it is suggested, for example, that large personal wealth

demands larger protective service for which it should pay accordingly.

A public expenditure alters every private budget and standard of living: hence the principle that the family, the consuming unit, should discuss, understand, and express its opinion upon, public measures involving expenditure. Are we to have a State University supported liberally out of tax funds? It makes available specialized higher education for all children who can avail themselves of it, including our own. Shall our State segregate the feeble-minded? It will cost, but it is the cheap way in the long run to reduce vagrancy, crime and irregular living. It is an insurance for progress and against individual and social suffering. Is personal health best safeguarded in part through public expenditure for such and such definite measures, as school nurses, housing inspection? Affirmative answers to such questions mean that we choose to spend our private income in part through the public purse. Most students believe that such spending should be more commonly chosen, heartily supported when chosen, and that results should be demanded.

Much of community service also reaches the family from voluntary institutions such as the church, clubs, associations in which the family holds membership and to which it contributes out of the family purse. Such institutions are simply joint or cooperative methods of securing certain satisfactions outside of industrial relationships. In general, the family enjoys a social income and the family pays.

Family income on farms.—For the seven years 1912-1918, 25 farmers in a certain district in Ohio secured an average farm income of $610 including a labor income of $276 and a 4.6 percent interest income of $334 on their investment in the farm, but not including the food, fuel and housing for their family estimated to be worth $359. On 100 farms in Indiana, the average farm income was $1856 of which $558 was labor income and $1298 interest income at 5.7 percent on the investment in the farm, and in addition the family's living of

food, fuel and housing was estimated at $435. On 60 Wisconsin farms in 1913-1917 there was an average farm income of $1293 including $408 labor income and $885 interest income at 4.7 percent, and in addition the family secured a living estimated at $392.[1]

The farm woman and family income.—On many farms the housewife contributes about as much to the family living by the money value of her unpaid housework as her husband secures in that part of the money income which represents the net value of his labor on the farm. Of course those parts of the farm money income that equal the rent value of the land and the interest income on the investment in buildings and machinery may be fairly regarded as joint income of husband and wife, if as is common in modern American families all property be considered as belonging equally to husband and wife. Even that part of the farm money income which is profits due to the farmer's skill as manager, rather than to his toil as laborer, is partially ascribable to the contribution of the woman on the farm who helps him make wise business decisions and plan his work. The man makes in his farm labor a unique contribution of course, but so does the wife in her household work. There is therefore sound reason for saying that the farm woman may be, and sometimes is, as important a financial factor in the combined business of farming and housekeeping as is her husband, and that she may contribute as much as he to the family's living and to what the farm contributes to the nation's annual product.

Moreover, farming and farm housekeeping may be said to underwrite all other industries since the workers in all vocations must live, and live wholesomely, economically, and efficiently to perform their essential economic tasks. Thus farm men and farm women have a double national responsibility. How can farm housekeeping be made more efficient? In

[1] U. S. Dept. Agr. Bul. 920, *Farm Profits.* See also, Farmers' Bulletin 746, *The Farmer's Income;* and Farmers' Bulletin 635, *What the Farm Contributes Directly to the Farmer's Living,* U. S. Dept. Agr.

housekeeping the human factors of labor and management and the material factor of proper equipment determine the economy of operation.

Farm women have opportunities as never before to improve the human factor in their work, that is, to become more proficient in old tasks and to equip themselves for new tasks. The state and national governments are issuing bulletins for farm homemakers that are more practical than the earlier ones. Home-manual text-books, especially for the housewife, are on the market; and the extension work of the State College or University brings household specialists right to the farmhouse door. Farm men who have had agricultural training should encourage their women to get training in home economics, and both should remember that there are two types of tasks to become proficient in—routine labor or household tasks as such, and the work of the household manager who considers, decides, plans and buys, who studies equipment and provides for improvements, economies and betterments in the household business, just as does the man at the head of a business whom the economists call the "enterpriser" and upon whose decision-making rests primarily the success or failure of the business.

Farmhouses should be fitted with the best equipment possible, since that both frees the workers from needless drudgery and also makes possible improvements in the living which the family secures. Equipment enables the housekeeper to meet her present tasks with less time and energy, and with the time and energy thus saved, she can provide additional elements of a good home for her family's comfort. The first result is of course worth seeking in itself—to lighten the useless drudgery of a worker appeals to any one's judgment; but when the worker benefited is in one's own family, then the husband should quickly act in securing improvements for the home. Farmers are beginning to appreciate the far-reaching results on their industry of raising as rapidly as possible their own standards of living, that is, of securing a better living, more

education and more opportunities generally. Higher standards will bring a more productive industry and better prices to maintain the standards, and thus rural life will hold its own in relation to urban advancement.

There is another basic justification for investment in better household equipment on the farm. If you free some time of the farm woman from her worst household drudgery, you will also free her mentally to become an efficient and active partner in the business operations of the farm. Women often take over some farm work like the poultry or fruit as their special interest and many, either because of labor shortage or of free choice, themselves work at these or other farm operations. The economical organization of housework secured by the training of the home woman and by securing adequate equipment for her household tasks is, therefore, a direct service to better agriculture since it will make possible the taking by the woman of more responsibility regarding the farm work.

Progressive farm men will also see the advantage of securing more assistance from farm women outside the house, at least in ways of intelligent planning and watchful guidance of work, and will therefore favor securing such better household equipment as will make this possible. The farm woman can most wisely contribute as one of the directing partners rather than simply as a labor unit on the farm. It will widen her interests and her husband's interest, and it will be a financial insurance in case the death of her husband should leave the farm on her hands which otherwise would be untrained to direct it.

Income from garden, poultry, etc.—A study of "the value of the small plot of ground to the laboring man" made by the U. S. Department of Agriculture in nine mill villages of western North and South Carolina, collected economic facts in 1915 regarding 548 home gardens, 165 home poultry flocks, 74 family cows and 62 hogs.[1] The plots available were usually one quarter acre for house and grounds, and the mill companies gave in addition free pasturage outside the village. One

[1] Farmers' Bulletin 602, U. S. Department of Agriculture.

company encouraged gardening by maintaining a model garden under an expert. Another kept a pure-bred dairy bull. In several, garden contests were held for the best appearing premises—a practice that might be extended to recognize the garden that gave the best financial returns.

The average value of vegetables raised was $29.87, including good and bad returns. In one village one-third of the gardens produced an average of $48 and the other two-thirds an average of $16. The average cash expenditure was $3.54, leaving a net return of $26.33 per garden. The average garden was 723 square yards in area or one-seventh of an acre. Some 22 different vegetables were raised, but the average was 9.5 kinds per garden. Beans, tomatoes, and sweet corn were almost universally grown; peppers, cucumbers, beets and greens were grown in over three-fourths of the gardens, and okra, onions, and peas in over half. Fruit was grown by only one-fourth of the families with an average of $3.20 in value when grown.

The average home poultry flock (13.2 fowls), laid 86 dozen eggs a year, worth $19.35, and contributed 36 poultry to the table, worth $11.17, a total of $30.42. The corresponding cost was $16.22, leaving a net return of $14.20 or $1.08 per fowl kept.

Hogs, where kept, were usually housed outside the mill village. The average return, from 62 hogs that were fattened, was 270 pounds of meat secured at a cost of $18.46, and worth $24.30 in local markets at nine cents a pound, leaving a net gain of $5.84.

Family cows costing $46 to purchase, gave an average of 270 pounds of butter, and 605 gallons of buttermilk worth locally $119.90, at a cost of $80.49 in feed, a net gain of $38.41.

The child's contribution to income.—The child who performs a useful service about the home contributes thereby to the family's living by adding to the "wealth heap" of goods and services available for their consumption. The child who

learns to dress himself releases that much adult labor to other purposes. The child who learns to pick up after himself, to take care of his own clothing, to put back books and magazines, is on the road to becoming a loyal cooperator in the family state. The child who lends a hand in routine family tasks is well toward off-setting the labor which he causes the family. The child's coming adds to the work of a household and this cost factor grows with his age, but his labor contribution to the home in simple tasks for self or others, grows also, and will sooner or later approach his labor cost, and shortly wipe it out entirely. On the farm, the child of ten probably helps enough with production for the market as well as with household tasks, so as to increase the net money income of the farm over what it would have been without him. The urban child has less opportunity to contribute either to actual money income or to reduce money outlays (until, of course, he becomes a wage-earner). He can, however, make a labor contribution that increases with his years and offsets entirely, it may be, his labor burden to the family, that is, the amount of household labor his presence adds to the total amount required.

Where the older child takes the place of a hired houseworker and is paid an amount equivalent to what that worker would have received, he makes no contribution to family income, no matter how much the accommodation may be and the possible educational values involved. When the child does housework without money compensation, he makes a definite contribution to income—the family, including himself, is that much better off and lives that much better. Of course, if the child is paid for housework and then uses this money for his own needs which would have been met out of family money anyway, his services will have increased the real income.

Shall children work for money outside?—The child's own best interests must be the deciding consideration—and that means choosing what is best for the child's development. Full-time industrial employment before maturity ought to be

made unthinkable in the American standard of living. Complete devotion to academic schooling without experience with work is nearly as undesirable as too early employment for boys and girls of the middle teens and older. Child labor laws wisely forbid regular employment up to 14 years or older, and, where work is permitted, certain hours are already being reserved by certain State laws for compulsory vocational education, or for physical and military training. This margin of reserved time for broad educational and recreational purposes should be increased. Of course its increase will increase the economic cost of the child to the family and in the long run that is a tendency favoring smaller families; but that may mean a better chance for each child that is born.

Shall children below child-labor age work for money? Yes and no.—Avocational ways of earning money as by gardens, canning clubs, poultry and the like developed within reason are absolutely desirable. Their results on the boy or girl are a powerful plea for life in the open country. Yet this same productive process of canning for example, which has everything to command it when conducted under educational conditions, may prove a most undesirable industrialized occupation for the young person over the child labor age as well as for the younger child. Some gainful tasks outside school hours and on Saturdays are desirable for boys and girls of 14 and older and possibly for younger children. But the main task to 18 years of age and indeed to 21, is to promote physical growth and secure broadening experiences.

What work can be done by children?—For children under 16, work about the home, especially those tasks which would otherwise be hired done, offer the best opportunity for occasional earning. For girls, this may mean regular routine tasks such as part of the cooking, dishwashing, cleaning, and the like, or regular or special sewing. Tasks such as lawns, walks, garden, etc., and heavier inside work and mechanical tasks of repairs and household mechanics seem to belong to the boys, although girls too may often undertake them. The

salvaging of old materials, the running of errands, afford other opportunities. Regularly pursued gainful projects such as poultry and gardening will be undertaken by many under 16, though they afford special opportunity to the older children. Part time industrial, commercial, and clerical work in shops, stores, and offices can wisely be undertaken only by those over 16, while street trades such as selling papers, blacking boots, messenger service, should be closed entirely to minors.

Earning standards up to 16 years.—The child should be in school full time and have necessary time outside school to prepare his school work. Recreation, play, physical exercise, should have second claim on his time. Work should be made a third claimant after study and some play are provided for. Gainful work should be made as valuable educationally as possible, carried on under desirable hygienic and social conditions, and compensated at its real value. Gainful work in association with parent's employment is often preferable, where possible. Earning elsewhere under proper conditions may be approved for boys under 16, but not to exceed three hours or a half-day a week, or reasonably longer hours during part of school vacation. Earning for girls under 16 should be exceptional except in remunerated assistance in housework at home, gainful household avocations such as canning and poultry, or wisely in association with the father's occupation.

Earning standards from 16 to 21.—Education and training are still to be given first place. Even if the individual must work to support his parents' family, the employment chosen should leave a fair margin of the time for study, at least eight hours a week. The occupation should be one that provides opportunity for promotion with goals ahead to which the occupation and study lead.

The earnings of children and young people alike lie under a double claim, to the earner and to the parents. The following facts affect these earnings: The ancient legal principle that any minor's earnings belong to his parents; the present psychological fact that the child often feels himself full owner of

them; the economic costs including current charges for bed and board which the child owes its parents and which he himself must some time as an adult take over; the educational need that the child be not discouraged by attempting the impossible in supporting himself too early, but that he acquire self-respect by contributing to his own support, first in small part, but gradually looking forward to entire self-support. It is important that he learn unselfishness by helping his family, that he get his full economic bearings, and that he learn how to earn, spend, save and give money—his own money. The whole economic problem of the child in the middle teens and beyond needs careful attention by the family.

Summary.—The labor of the child or man inside the home, the constant toil and more or less wise management of the housewife, the thrift displayed in judicious saving, whether expressed in financial investment or in the purchase of permanent production and consumption goods for the home, even the laying out of taxes in ways that benefit the home, all these are determining factors of the family income as real as is the pay envelope or salary check which the wage-earner brings in. All these factors cooperate to provide the family's living or experience of satisfactions. An economic good such as the freshly laundered linen on the dining table, source of esthetic gratification to all about the board, is there at that moment making its satisfying contribution to vital income, first because the man's money income made its purchase possible, but no less so because the housewife's weekly laundry service has returned it from its soiled and useless condition after previous service to one of renewed and full utility for another use. Other economic services by the household have also been necessary so that the services of this cloth are available in the stream of the family's satisfactions. There was necessary first the original decision to save and invest the household's money (for this is what the purchase of a permanent use-good, the linen, meant) instead of spending it wastefully for some dispensable one-use good such as a luxury foodstuff that would

have given temporary satisfaction only. Next there was necessary the decision to make the investment in permanent goods-for-use which as used would give off dividends in personal satisfactions, rather than making, for example, a financial investment such as a savings bank account which gives off dividends in money interest. Next, there was necessary the original act of selection of good fabric and pattern by the housewife in the shop. Then there was the storage of the cloth in the linen closet until the time of desired use. Finally, there was necessary the immediate arranging of the cloth in its setting of table and glass and silver to give a combination that carries the greatest possible satisfaction that the judgment of the housewife can create. All these are economic services which make possible the family's present satisfaction from the linen cloth upon the table, and obviously much more than wage-earning by the man was necessary to get it there and keep it there.

CHAPTER III

HOUSEHOLD EXPENDITURES

THE HOUSEHOLD BUDGET

The expenditure or use of household income, whether it be money income or that from household labor, management, and capital, or that from free community goods and services, provides the satisfactions of life for the members of the household. Production creates the materials of the income and consumption or expenditure of income uses them up, resulting in human wants satisfied. The theory of expenditure or "income use" has largely concerned money income and its allotment in household budgets, but some general principles of expenditure applicable to the entire real income can be suggested. These principles together with the household budget in its general aspects and in relation to standards of living, are discussed in this chapter. Practical problems of handling family expenditures, and accounting methods are reserved for the concluding chapter of the book on Handling Household Resources.

General Principles of Expenditure

The fact of the lessening amount of satisfaction from each successive unit of any commodity or service, has been called by economists the principle of diminishing utility in consumption. The sensory apparatus becomes fatigued or habituated and continued experience of a given kind soon dulls the edge of our enjoyment. A corollary of this principle is the natural tendency to variety in our expenditures. Additional units of a kind already experienced tend to be less keenly enjoyed, and so we turn to novel goods and services and variety

in consumption results. Since we are ever turning to the new, and each new consumption good tends to be used down to the same level of enjoyment, it may be said that "The last dollar spent for each of different kinds of goods and services tends automatically to buy an equivalent amount of satisfaction." Such is the traditional mercantilistic view of consumption given by the economists—"the margin of consumption is a straight line."

This utilitarian measuring of satisfactions and preferring one above another is the logical explanation of the theorist rather than a psychological report of human behavior. It is truer to say that in expenditures we react selectively, or in terms of our immediate preferences, as regards the possible goods just now before us, and that with most persons there is little of the cold calculation suggested by the diminishing utility principle. Things present objectively exert a stronger pull than those out of sight. With some persons, commodities with a sensory appeal, for example, food, bright colors, the rush of air in an auto ride, call louder than inner satisfactions, for example those arising from thought activity or those of ethical judgment. Again, habit or training may set the mind this way or that, according as the basic controls of the instincts have been affected in the individual's experience to date.

Choices in spending are also largely determined by social imitation. We go with our crowd and strive to maintain the standard of living of our class. Yet for most of us there is a zone of conscious decision lying between what we know we cannot have, and hence about which we do not bother ourselves, and what we buy as a matter of course since every one (in one class) has it. With regard to some matters each person measures what its worth is to him (and here doubtless the principle of diminishing utility is effective), asking himself whether he needs it, what it will cost him in money to get it, and perhaps whether he could not find it at less expense in some other market. It is such decisions that are of effect on

the demand side when market prices are "set by supply and demand." Further, progress in economic consumption will come in part by widening the zone of conscious decisions and securing more attention to values and costs. Decisions once made, however, tend to be habitual and become more or less mechanical.

Such expenditure decisions are made in the market place as regards use of money income; but as regards the distribution of the housewife's time and managerial skill (and this is as truly an "expenditure" as is that of money) they are made in the home. The principle of diminishing utility concerns the application of the housewife's time to different tasks as much as it does money use. She does not devote all of her time to any one task, since the decreasing amount of satisfaction secured by added units of it applied in one field, say housecleaning, leads her to turn to other tasks that give larger satisfactions for her family, and so the last unit of time devoted to different tasks tends to bring equal amounts of satisfaction or real income to the family.

The two problems of time value and money value to the housewife merge in the marketing problem: "How far will it pay me to use my time in seeking the lowest price in my retail market?" The answer must be an individual one, depending upon the value of marginal time and of marginal money to the person concerned as well as upon the amount of money that can be saved by care in buying. The suggestion of measuring such money saved in terms of the percent saved is an aid to wise shopping, but the question of how much time is worth, and how much money is worth to the individual is still to be decided.

Proportion is another general principle of expenditure which applies to money or time or goods. First, proportion is important as regards different objects of expenditure. As regards money use, one person may be "dress-minded" and others may waste their substance upon other objects of spending. The household budget problem is largely a matter of bal-

ancing one need against another and forming a harmonious combination of varied elements, any one of which by itself and in excess would become an ugly element in life. Next, proportion is to be sought regarding the interests of each person in the family, the husband and the wife, older children and younger children, boys and girls, each one duly considered and no one overlooked. The former superlative importance of the man of a family, of boys rather than girls, or of the oldest son under a system of primogeniture, runs counter to the modern ideal of equality and democratic cooperation in the family. Finally, proportion should be sought in expenditure between saving present income for future needs and spending it at once for immediate needs. This is the problem of thrift, of insurance, of investment.

And these rules of proportion—as regards objects of expenditure, the persons benefited, and the balance of future against present—are effective not only as regards money, but quite as much as regards income from household labor, household management, household capital, and as regards social income. In community expenditures, for example, we are learning to spend for the future as in buying up park land in advance of city growth as well as to spend for the present in opening a breathing spot in the slums; to provide adult education as well as that for children; and to broaden out our municipal program from merely providing police protection to the furnishing of education, recreation, music, health protection, etc. by successive acts of community consumption.

Testing expenditures by social results.—Any act of spending should be tested by its effect on the broader social group and this test may be applied in two ways:—First, as regards the forward-looking results on the spender and on those for whom the spender is responsible, as in the family group. If a mother buys a garment that fades and fabrics that are weak and soon disintegrate, then the results of that expenditure are disappointment, pecuniary loss, a sense of shame at being ill-clad, and the discouragement that inefficient service

brings. Efficient spending contrariwise brings satisfaction to the family served. But the social results of spending are also backward-looking to the conditions under which the thing bought was produced. My demand in the market for a certain object helps continue the economic conditions under which that object was produced; my declining to purchase a certain object tends to stop the production of that object. So consumers' leagues have urged buyers to learn the conditions of production of various commodities and encourage by their trade good conditions of manufacture and refuse to buy the product of bad working conditions as in sweated industry. The trade-union label works in part similarly for good industrial conditions.

The social effects of spending are important as regards one's spending in terms of necessities versus luxuries. The consumption of every individual includes some items that are physically necessary, some that are desirable but dispensable, some that are enjoyed but non-essential, and some which the individual himself regards as questionable. The objects within these classifications vary from one time to another and progress is partly measured by the movement into the inner center of desirables and necessities of items that have been further out in the field of non-essentials and luxuries.

Luxury is an ancient problem and many justifications have been urged for it—its stimulus to the productive energy of the wealthy; the gradual rise of standards of living of the many to take in the luxuries of the few; the theory that the luxuries of the rich make work for the poor; the effect of luxurious spending upon the more even distribution of property. The fundamental charge against unreasonable luxury or waste is that the productive energy of society, that is, the present labor power and capital, is diverted from the manufacture of necessities which thereby are made more scarce and expensive than they need be, to produce non-essential goods; and further, that restricting wasteful spending on any level of income tends through saving to increase the growth of industrial capital and hence augment the productive power of society. The dollar

spent and the dollar saved therefore do carry economic results far beyond the present act of spending.

Luxury cuts across the economic progress both of the individual and of society. It is not the wealthy alone who need to check up unwise expenditure. Indeed it would be well if we gave up entirely our present concept of luxury, which is largely an envious criticism of others who have things which we do not possess. We might better check each his own spending in terms of individual welfare and the results of our spending on social welfare. In the smallest income family there is some margin of spending for tobacco, drink, unwise selection of food, clothing, and other commodities, poorly chosen recreative and cultural goods, that bring to the family less of satisfactions that it might secure on a better regulated scheme of spending. "We want what we want," without much weighing of values, and while one would not ask that the consumption process be reduced to terms of the yard-stick and the chemist's balance, yet there is a reasonable counting of results which may be demanded on the ground that it increases the net satisfactions in life.

The household budget.—The budget which is one means to better housekeeping, indicates improved financial organization or rather it is one definite part of such financial organization. Financial organization in any field, whether that of business, government service, or the household, involves three stages: First, a plan for contemplated expenditures, and this technically is the budget; second, an accurate record of items of income and expenditure as they occur, and this is furnished by books of account; and third, an audit or a review of expenditures from time to time to examine both the accuracy of the record and the justification for the transaction in accord with the budget plan as adopted. The results of the audit also serve especially as the basis of the new budget. The sequence is, therefore, from the budget or plan of expenditure through the bookkeeping records of income and expenses as they transpire, to an audit or review of financial operations upon which

there is then based the new budget for the succeeding period of time.

The family budget is a detailed schedule of anticipated household income and its allotment into proposed expenditures, drawn up as a guide in practical household management. Thus, if I expect my income to be $3000, I may plan a budget which allows $600 for rent; $600 for food; $400 for household operating expenses; $400 for clothing; $400 for personal expenses; and $600 for savings and investments. The term budget is also used to indicate a summary of actual income received and expenditures made in a past period of time, for example, a year. Thus, my last year's income of $3000 may have been spent so as to make a "budget" of $480 for rent; $726 for food; $360 for clothing; $460 for operating expenses; $328 for personal expenses; $646 for savings. A budget is, therefore, either a projected plan for spending or a record of spending already accomplished. As a plan for spending, its purpose is to secure a better distribution of funds, a more satisfactory living than the haphazard spending of family income provides. As a summary of past expenditures its value lies in serving as a basis for making this plan for future spending. The summary of past expenditures has been called an "actual" budget and the plan for future spending a "theoretical" budget.

Budgeting for spending and saving may be regarded as the planned use of money which will give the largest possible satisfaction both by distributing income among current present needs in proportion to their importance and by reserving part of income as savings for future needs. The budget balances future and present and makes suitable allotments for spending and for saving.

Budgeting for present spending requires full knowledge of one's present needs, of their relative importance, as to which can be left unsatisfied without present or future loss, and as to which are absolutely essential and how their satisfaction can be most happily and most economically provided. Future

needs must also be brought sharply into mind to measure them against demands for present spending. In other words, there must be a facing of the actual situation in its concrete details, by the individual or family—just what must be had now, and just what must be provided for the future.

The budget items.—There is a traditional classification of household expenditures into five budget items—housing or shelter, food, clothing, operation or housekeeping expenses, and the sundry expenses which have been variously called higher life expenses, advancement, personal expenses, welfare expenses; to these should be prefaced a sixth item, that for savings. The five headings mentioned carry the following meanings:—"Shelter" includes the annual outgo for the rented or owned house as a structure but not payments toward the purchase of the house or for its heating, lighting, cleaning, furnishing or other costs incidental to the use of the house; "food" means the cost of food materials as purchased, but none of the costs of its preparation as those for the rental, heating and lighting of the kitchen, for the fuel for cooking, for ice for cooling, for cooking equipment, for the labor cost of food preparation, etc.; "clothing" similarly includes the purchase price of ready made clothing or fabrics to be made up and the labor cost of their making, in other words the initial cost of the wardrobe, but not the costs of its cleaning, laundering and the like; "operating expense" includes all miscellaneous expenses for running the house and for food and clothing services such as fuel and light for the house, fuel, ice, and service for cooking, supplies and service for clothing, cleaning and upkeep of furniture and in addition the thousand and one items that arise in connection with the housekeeping activities at the home; "personal expense" includes the remaining expenses of family, most of them of a cultural nature having a personal connection with members of the family, including for example, recreation, education, travel.

Leeds has suggested[1] that an accurate cost accounting would

[1] Leeds, John B. *The Household Budget*, p. 163.

break up "operating expenses" into the three functional divisions of house, food, clothing, so that these three with personal expenses would comprise the budget items. An analysis of operating expenses show that they could be so allocated. There seems better reason, however, in leaving the five traditional items much as they are and adding the sixth separate item of savings which has usually been submerged in the personal or advancement item. This makes the six items of the household budget: Savings, Shelter, Food, Clothing, Housekeeping or Operating Expenses, and Personal or Advancement Expenses. These budget divisions are discussed in later chapters.

Variable influences in budgeting.—Amount of income more than any other single factor affects spending. That is to say, the relative distribution of the income between the different items of the budget will obviously vary according to the size of the income. Some principles of variation according to income are stated below in this chapter under Engel's laws of consumption and Ogburn's equations. Among other factors which control the distribution of income are:—Size of family; age and sex of children; occupation of father; housekeeping skill of the mother; the education of both parents and the standards of living of the homes from which they came; life in the country or in the town and the size of the community; present marketing facilities and local levels of costs, as of rents; housing in apartment or detached house; social and religious customs that affect expenditures; and, finally, personal choice or even caprice in emphasizing one expenditure rather than another. While variations in expenditure appear in different families there are great social uniformities in expenditure, or "standards of living."

Standards of living.—The term "standard of living" has been used to indicate the commodities and services which a family or a social class is accustomed to enjoy and "to obtain which it will make any reasonable sacrifice such as working longer hours or postponing marriage." One's expenditures, organically related to each other and to the spender and to the

social group of which he is a part, constitute his standard of living. By one's standard of living one may mean only the actual commodities and services which he is able to secure, or may also include the ideal items desired but not yet secured. A distinction has sometimes been made by calling the larger complex of both desired and realized elements one's standard of living, and the realized items alone one's plane of living. Whether we think of the narrower or wider idea, one's standard of living has a close connection with one's personality; it is an expression to the community of one's achievement, an index to others of economic success, as well as the sum of satisfactions which one is enjoying. Lowering one's standard becomes therefore, not only an experience of failure but also a public confession of failure, a kind of disgrace, and one will by every effort keep from it. Needless to say this feeling often operates to maintain perverted standards as well as good ones.

Many standards of living exist in a given community and they may be thought of as arranged in a scale as a series of ascending levels, each marked by a larger variety of goods and services than the one just below it. These standards are secured of course by incomes of various amounts and by various degrees of skill in the use of income. Human nature might conceivably have been of such a temper that despite circumstances of larger or small earnings every one, rich or poor, would have gone on an even tenor of expenditure, all using the same kinds and quantities of economic goods, and satisfied with them. There have been communities where an equality in consumption has been sought; but human nature seems naturally to be competitive, to enjoy distinctions, or at any rate to seek satisfactions and comforts and out of their attainment distinctions arise. It is as though society were organized in successive plateaus of economic consumption, and men strove to raise themselves from one level to another, anxious to rise still higher but even more fearful of falling back to a lower level. So far as this is true, it is evident that standards of

living are one of the great drives in production and a great agency in social stability and also in progress. No wonder the "maintenance of standards" and "advancing standards" are effective slogans in wage disputes.

Standards tend to maintain wages against wage-cuts. Increase in wages makes possible higher standards which once attained are themselves a protection against reductions to old wage levels. Higher standards, by increasing the individual's efficiency in production, may themselves create the conditions out of which higher wages come.

The standard of living of any group exerts a formative influence on the lives of the children in that group so that they tend to at least reproduce this standard in the next generation. For example, workingmen's children by reason of the amount of education they secure, the start in life they obtain, and ideas of early marriage and family building which they unconsciously absorb, tend to find themselves as adults where their parents were. Children of members of higher income classes are under other influences as to training and as to the scale of life that is expected of them and they receive economic advantages of education and of capital that enable them commonly to repeat the financial success of their parents. Each standard, for the families concerned, tends to perpetuate itself in the next generation, yet there is also the sifting out from higher standards of those entirely incompetent and unable to maintain their place, and there is the ladder from lower standards up to higher ones on which the unusually competent youth constantly rise and better themselves. The phenomena of standards rising for a whole people that America has experienced in the last hundred years are due of course to our marvelous natural resources, to the ratio of population to resources as the latter were being reduced to possession, to the growth of capital, and the progress of invention. Yet in the midst of progress for all, the rule of children tending to reproduce their parent's standards can be seen at work, and this also despite the numberless exceptions of the strong and well en-

dowed who greatly raise their standards and of the incompetent who fall back to lower standards.

Classification of standards.—In 1855, Quetelet, a Belgian official, reported on 1000 Belgian workingmen's budgets that they fell into three classes: the dependent, whose income was supplemented by poor relief; the poor, who were self-supporting but were saving nothing; and those living in comfort who never received aid and were able to lay up something for old age. The distinctions then made are applicable to-day and a prime question as yet awaiting an unequivocal answer is whether America will take as its workers' standard of living a wage that is merely "self-supporting" or one that provides for "living in comfort and saving." While in America we pride ourselves on the absence of caste, we do have "non-competing economic groups" which have often been classed as those of: sub-standard workers, standard unskilled labor, factory labor (machine tenders), skilled trades (e.g., mechanic), clerical workers, professional workers, executives, and the leisure class.

The last named group, the leisure class, is given by Veblen[1] a rôle of controlling importance with regard to the standards of living of all other social groups. The expenditures of the idle rich, he suggests, set ways of living for the imitation of all grades below them down to the most squalid home. The wives of men of the executive group exercise a similar function by their manner of spending. They display a kind of vicarious leisure which is an index of the economic power of their husbands who are too interested in business to devote time to leisure activities. Conspicuous consumption which the women of the upper groups display becomes therefore the general method of social emulation and all the way down to the lowest standard each grade imitates the one above, up to the top where consumption seems the only economic relationship and the setting of styles is an avocation.

Income levels of expenditure.—Money income deter-

[1] Veblen, T. *Theory of the Leisure Class.*

mines a horizontal economic stratification of families which may be described in part as follows:

1. Sub-standard incomes are those of families temporarily or permanently with inadequate income because of unemployment or because of mental or physical incapacity or other disability, and in which the simplest physical needs can only be fully met through public or private charitable aid given.

2. A minimum standard income or an American living wage as usually understood provides for all physical needs and a few cultural needs such as the daily newspaper and the contribution to church and labor organization, but is often inadequate as regards care of health, there is insufficient financial protection by insurance and savings, and little account taken of man's social needs. This standard costs probably $1200 to $1500 at present. This standard would have cost $900-$1000 in 1913 and $1800-$2000 at the height of prices in 1920. Of this amount food requires over 40 percent. The unskilled laborer should have a wage that will achieve at least the minimum standard.

3. The comfort standard provides for some personal choice in satisfying physical needs and allows for expansion of social needs; it is secured by city incomes of $1800-$2200 or thereabouts, of which about 35 percent goes for food. Savings and more adequate insurance mark this level; home ownership is possible; also high school education for children; clothing is chosen partly by social standards. The piano or victrola and the "radio" are common items of property, and the "small car" is not infrequently owned although at sacrifice of balanced spending. The comfort standard is typically that of the skilled workman and successful clerical and business employee. This standard would have cost $1200-$1500 before the war and $2400-$3000 at the peak of the war rise in 1920.

4 The moderate income standard is that secured by annual incomes two or four times that of the fair minimum standard, or say $2500 to $5000 a year, of which 25 to 30 percent is required for food. It is the standard attained by average pro-

fessional workers, small proprietors, and minor executives on salary. Hired household service is used to the extent of one or two days a week, but rarely a full-time employee. The present outstanding item of consumption property is the small car. College education for children is common, although often at a sacrifice. Cultural goods, such as books and vacations, appear more generously. This standard would have cost $1800-$3500 before the war and would have required $3500-$7000 at the price peak.

5. The liberal income is from two to four times the moderate income, or in money from $6000 to $20,000 more or less. It represents the standard of successful professional workers, large proprietors and important executives. The "servant keeping" standard and the large car standard (one or both) might describe this group on the material side. Formal hospitality, travel, and other cultural goods may have a large place.

6. The super-liberal standard may be described as that of incomes of $25,000 or more. It is marked by the large domestic establishment with a staff of workers with specialized tasks, by the multi-car garage, by the country house and the city house, by art and other collections of consumption goods and by other consumption devices that mark ascending scale of income. This is the rarefied atmosphere of the leisure class which Veblen has so acutely described.

The home is the largest single item in these different standards of living made possible by larger or smaller incomes; or stated otherwise, the standard is largely expressed through the home. Complete information regarding family expenditures or budgets on different income levels would show the social forces that determine these standards of living. Budget material for larger incomes is not yet available but we have in the studies of standards of living already made intimate views of household budgets on the minimum and comfort levels of income. The development of these studies and some of their more important findings will be next presented.

Household Budget Studies

In surveying the studies of family budgets, one finds as Chapin has pointed out that the facts have been secured in three ways[1]: (1) By estimates, made by more or less competent persons "for a family in a given status, of the income and of the kind, amount and cost of the principal items of expenditure"; (2) by a fact report of expenditures in a family taken as typical of the class in which it is found and "obtained either by independent testimony of the family, by personal inquiry made by a reporter or by inducing the members of a family to make out and keep in an account book a record of daily expenditures"; (3) by the statistical combinations of reports secured by either of these methods, usually in the form of average expenditures.

The motives behind budget studies have varied: sometimes merely to contribute to social facts for the benefit of any one who could use them; sometimes to get at costs of living as likely to affect trade; often with the philanthropic or social welfare motive; sometimes with the direct idea of setting standards for family relief work; finally, the light they might throw on wage-standards is one of the oldest reasons for budget study and this has been the predominant motive in the last half-dozen years.

Earliest budget studies.—Sir William Petty, the English seventeenth century economic writer, used estimates as to the average expenditures of workingmen's families as early as 1672 as a basis for judging the possibilities of trade with Ireland, and of taxation in England, his argument in the one case running that since the average Irish peasant's family spent only fifty-two shillings a year there could be little trade, and in the other that since the English laborer's family had annual expenditures of about seven pounds, the government might by a tax of one-tenth of this on ten million subjects secure seven

[1] Chapin, R. C. *The Standard of Living among Workingmen's Families in New York City.* New York, 1909, p. 3. "Workingmen's Budgets in Statistical Literature."

million pounds. About a hundred years later in England two collections of individual family budgets were made which are the beginning of modern investigations of standards of living. David Davies, a clergyman in a rural parish, endeavoring in 1787 to find why two-fifths of his parishioners were receiving relief from the parish, bethought himself to take down such facts as he could secure and make an estimate of the earnings of six typical families and their various outgoes. He was surprised to find that the families were all living on a deficit due, as he concluded, to the fact that wages had been practically stationary for years while prices of necessaries had been advancing, and hence the parish purse had been compelled to meet the balance. Davies' method was to find out the weekly earnings and outgoes of a family and multiply by 52 to secure annual figures, and then add in a fixed sum of six or seven pounds for rent, clothes and other irregular expenses. Davies sent his six budgets to correspondents in various parts of England and asked them to collect similar schedules. When data of the same general tenor was returned and he had in all 133 budgets from 28 different communities, he made a study of underlying conditions and published his conclusions in his "Case of the Labourers in Husbandry" (1795)[1], including in it the family budgets. Parts of his criticism and program of recommendations seem very modern: Standard wages should be set in terms of a minimum wage, not a maximum wage as under the Statutes of Elizabeth; the minimum should have a distinct reference to the cost of living and should vary as the price of wheat or of bread; the standard wage should be for a family of five persons and if the family is larger a poor grant should be given if necessary; regularity of employment for men should

[1] Davies, David. *The Case of the Labourers in Husbandry* stated and considered in three parts—I. A view of their distressed condition. II. The principal causes of their growing distress and number and of the consequent increase in the poor rate. III. Means of relief proposed. With appendix containing a collection of accounts showing the earnings and expenses of labouring families in different parts of the Kingdom. "The Labourer is worthy of his hire." Bath, 1795.

be sought; women and children should be trained to earn as well as men, particularly by spinning; where relief was given it should be after comparing family income and expense. Two of Davies' typical budgets follow:

Family No. 4, man, wife, 3 small children				Family No. 5, 5 persons			
WEEKLY EXPENSE	£	s.	d.	£	s.	d.	
Bread or flour		2	6		3	9	
Yeast or salt			2½			3	
Bacon or other meat		1	9		1	8	
Tea, sugar, butter		1	2¼		1		
Cheese (seldom any)			2½			0	
Beer (seldom any)			5			0	
Soap, starch, blue			3			6	(woman
Candles			3			3	washes for
Thread, thrum, worsted			2			3	2 laborers)
Per week		6	11¼		7	8	
Per year	18	0	9	19	18	8	
Earnings per week							
Man		8	4		8		
Woman			8		1		
Total per week		9	0		9		
per year	23	8	0	23	8	0	
To the above expense per annum	18	0	9	19	18	8	
Add rent, fuel, clothes, sickness, lying-in	7			7			
Total expense	25	0	9	26	18	8	
Total income	23	8	0	23	8	0	
Deficiency per year of earnings	1	12	9	3	10	8	

Eden in his *State of the Poor* (1797)[1], a famous work on social conditions in England, prints about 100 family budgets which were secured by drawing up a schedule of inquiry and sending a person about to interview families. In both these

[1] Eden, Sir Frederick Morton. *The State of the Poor* or an History of the labouring classes in England from the Conquest to the Present Period in which are particularly considered, Their Domestic Economy with respect to Diet, Dress, Fuel, and Habitation; and the various plans . . . for the Relief of the Poor; together with Parochial Reports relative to workhouses, etc. Three volumes. London, 1797.

early English studies the motive is that of the person interested in improving social conditions. The method employed was simply to present the facts and estimates of expenditure, family by family, and thus secure a mass impression without statistical analysis or generalization by averages.

Frédéric Le Play.—This method of individual family study was refined and developed and made accurate by the famous French scientist, Frédéric Le Play, whose family monographs, published in 1855 under the title *European Workingmen,* are one of the great landmarks in budget study.[1] Each monograph presents with photographic minuteness and accuracy the facts of one family with whom the author had lived on terms of intimacy for some time. He draws his word pictures by means of an analytical description and of financial tables, so fully detailed that the reader in another time and land can picture to himself the domestic situation, the house, its appointments and equipment, the inmates in their household life and in their social relationship, both in present condition and in historical background, with as much vividness as though he were himself face to face with the situation. Le Play, professor of mining engineering in Paris, had as an intellectual avocation a consuming zeal for social problems that lead him to spend his vacations in studying the family institution as disclosed in actual individual cases in France, Belgium, England, Germany, Russia, Italy, Turkey and Africa. Securing an introduction and an opportunity to live with some typical family he would settle down and map out its inner organization with a scientist's fervor. Small wonder that the publication of his first monographs created a sensation, that the work was declared by the French Academy to be an important new method of social study, that the method was taken up by enthusiastic followers who started a nation-wide organization, La Société d'Economie Sociale, which continues its activities

[1] Le Play, Frédéric. *Les Ouvriers Européens.* Paris, 1855-1879.
For biography of Le Play, see H. Higgs, *Harvard Quarterly Journal of Economics,* June, 1890. For sample monograph of a Le Play study, see appendix to Chapin, R. C., *Standard of Living, op. cit.,* p. 326.

up to the present in local units and national meetings, in publications and propaganda. Le Play's first publication included thirty-six family monographs and he later added twenty-one more with a volume of methods. A second series of ninety-one monographs was issued by Le Play's followers under the title of *Workingmen of Two Continents,* the tenth volume being completed in 1899.

Ernst Engel.—Le Play's contribution to family budget study was that of a minute study of the individual case; there was no statistical analysis of the data. The statistical analysis of budget facts first appears in the study by Ernst Engel, head of the Statistical Bureau of Saxony and later of that of Prussia, called "The Relation of Production and Consumption in Saxony" (1857),[1] in the course of which he presents his estimate of the division of family incomes in Saxony upon three levels, in a famous table as follows:

ENGEL'S ESTIMATE OF FAMILY EXPENDITURE, SAXONY, 1857.

OBJECT OF EXPENDITURE	PERCENTAGE DIVISION OF ANNUAL FAMILY INCOME OF—					
	$350		$450		$750	
Food	62%	95	55%	90	50%	85
Shelter	12		12		12	
Clothing	16		18		18	
Fuel and Light	5		5		5	
Education	2	5	3.5	10	5.5	15
Public Security	1		2		3	
Health	1		2		3	
Comfort and Service	1		2.5		3.5	
	100.		100.		100.	

Engel had as his budget data the accounts of Belgian working families collected a few years before in connection with the statistical congress of 1853 at Brussels, also Le Play's budgets and other data. He deduced certain principles of family ex-

[1] Engel, Ernst. *Productions- und Konsumptionsverhältnisse des Königreichs Sachsen.* 1857. Reprinted in *Bul. de l'Institut Internat. de Statistique,* Vol. IX, 1895.

penditure that are evident in this table and that have since been known as Engel's laws of consumption. First, that as income increases the proportion of income required for food is a decreasing share of the whole expenditure (although the absolute amount of money spent for food of course actually increases as income increases). Next, that as income increases, the percent spent for clothing remains practically unchanged and the percent for rent and for fuel and light remain unchanged. Finally, that the percent spent for "sundries," for the cultural wants of education, health, reading, service, increases as income increases. Here was an iron law of food costs, that in low incomes they take a major part of the income but as income grows their demands are relatively reduced. Here too was a financial law of the expanding possibilities of personality, that claims some share of funds for cultural needs even on the smallest income, and that as income grows steadily demands a larger share for the satisfactions of the personal life as contrasted with mere physical needs.

Engel's contribution to budget study was in classifying expenditures of the actual budget material under systematic headings; arranging his budgets by income level; averaging family totals for each item of expense for each income level and getting expenses per capita for each heading; then transferring these average figures into percentage form; and finally estimating the percentages of expenditures for three income levels for Saxony as given above. Later he elaborated a scale of food consumption based on a unit the "quet," with variations for age and sex, that gives the child of one year a consumption of one quet increasing by 0.1 quet per year and giving the adult woman an index of 3 quets and the man of 3.5 quets. He thus made possible a comparison of food consumption in families of varied composition. Engel published in 1895 a study of the cost of living in Belgium which compared the costs at that time with those of forty years earlier; and among other works a lecture on "The Housewife's Account Book and its Significance in the Industrial Life of the

Nation" [1], which deserves mention both for its suggestive title and for its analysis of the family's financial problem into its threefold aspects of the budget, the financial accounts of income and expenditures, and the audit of the accounts with the preparation of a new budget.

English budget studies.—Before reviewing American budget studies certain English studies may be mentioned, beginning with Booth's great study of standards of living in London which included a budget study of a few families, and Rowntree's *Poverty*, a study of 11,560 wage-earning families in York, England (1899)[2], which established the fact that 27.8 percent were in "poverty." This included 9.9 percent in "primary poverty," with income insufficient to secure necessaries for physical efficiency, and 17.9 percent in "secondary poverty," with sufficient earnings which were not used however so as to maintain physical efficiency. The British Board of Trade made a foundational study of the cost of living in different parts of Great Britain in 1904.[3] The same authority made similar studies in other countries including the United States. Mrs. Pember Reeves' *Round about a Pound a Week* (1913)[4], gives graphic details of respectable London families living at the minimum and below it and suggests more cooperation by the State in order to do better for the children in such families.

Livelihood and Poverty by Bowley and Burnett-Hurst (1915),[5] studies working-class conditions in four English industrial towns. It outlines Dr. Bowley's sampling method of

[1] *Das Rechnungsbuch der Hausfrau und seine Bedeutung im Wirtschaftsleben der Nation.* Ernst Engel, Dir. des König. Preuss. Statist. Bureaus. Berlin, 1882.

[2] Booth, Charles. *Life and Labour of the People in London.* London, 1889-92. Vol. I (p. 136), and Vol. IX.

Rowntree, B. Seebohm. *Poverty, A Study of Town Life* (in York, England). London, 1901, p. 117.

Another English study coming between these was made by a committee of the Economic Club; viz., *Family Budgets being the Income and Expenses of 28 British Households, 1891-94.* London, P. S. King & Son, 1896.

[3] Summary in *Journal of Home Economics.* Dec., 1909, p. 442.

[4] Pub. by G. Bell & Sons, London.

[5] Pub. by G. Bell & Sons, London, 1915.

budget study, which studies approximately every twentieth house. One fact of interest in connection with minimum wage standards, is that in these typical families "certainly as many as 19.7 percent and not more than 36.2 percent of adult wage-earners have a wife and two or more children to support." [1]

This problem of the number of children which the father has to maintain was attacked by Rowntree in his *Human Needs of Labour* (1918), in which he concludes that the traditional figure of three dependent children is the equitable number to use. He considered in York, England, the 2161 families in which the mother was 40 to 45 years old and hence the family was practically completed. He found that 68.3 percent of these families had two or more dependent children; that 67 percent would have two or more dependent children for five years or more, and 61.6 percent would have two or more dependent children for ten years or more. Or, having regard to families with three or more dependent children, he found that 49.6 percent of the families had three or more dependent children, of whom 46.4 percent would have three or more dependent children for five years or more. Further, 27.5 percent would have four or more dependent children for five years or more, and 13.8 percent would have five or more dependent children for five years or more. Further, looking at the 5837 children in these 2161 families, 84.9 percent belonged to families having two or more dependent children for five years or more; 71.7 percent belonged to families having three or more dependent children for five years or more; and 54.4 percent belong to families having four or more dependent children for five years or more. Rowntree therefore fixes upon three dependents as the least number which can safely be counted in fixing minimum wages, and recommends state grants where necessary for larger families.[2]

Other English studies to be noted are Rowntree's and Ken-

[1] *Op. cit.*, p. 31.

[2] Rowntree, B. Seebohm. *The Human Needs of Labour.* Nelson, London, 1918, p. 29 and 36 ff.

dall's *How the Agricultural Labourer Lives,*[1] Vesselitzky's *Expenditure and Waste,* a war-time study of families of small income; [2] and especially the study in 1918 by the Working Classes Cost of Living Committee and that in 1920 by the Joint Committee of the Parliamentary Committee of the Trades Union Congress, Labor Party, and other organizations.[3]

Budget studies in the United States.—As is pointed out in the recent survey of budgets of American workingmen's families made by the National Industrial Conference Board,[4] some of the American studies include data representing sections of the whole country; others are restricted to a single community. In some cases the average facts are presented as secured by the study; in other cases, there has been erected a standardized statement of family costs more or less idealized; and one of the recent developments is the "quantity budget" or the standard estimate of the family budget, issued either for local or for general use.

Budget study in America began in the Massachusetts Bureau of Labor in 1875 under the direction of Carroll D. Wright and several successive studies were made in that State.[5] These show in 1885 for incomes from $300 to $1200 and over, the food expenditures decreasing from 64 percent to 51 percent, and the allowance for sundries increasing but only from 3 to 10 percent. In 1901, the food costs were from 56 to 53 percent and sundries had increased to 5 to 19 percent, an index of the increased prosperity of the people studied. Colonel Wright later became United States Commissioner of Labor and the Federal Bureau of Labor under his direction published its first budget studies which covered: 3260 families in iron, steel and coal industries (1890); [6] 5284 families in cotton, wool and glass industries

[1] London, 1913.

[2] Bell, London, 1917.

[3] *Monthly Labor Review,* 1921, October, p. 86; Nov., p. 86.

[4] *Family Budgets of American Wage Earners. A critical analysis. National Industrial Conference Board.* Century Co., 1921. This is an invaluable analysis of American studies and to it the summary herewith is indebted.

[5] Massachusetts State Labor Bureau, Reports for 1875, 1881, 1884, 1901, 1904.

[6] Sixth Annual Report, U. S. Commissioner of Labor, 1890.

(1891);[1] and the Italians in Chicago with food expenditures of 742 families (1897).[2]

In 1903 the United States Bureau of Labor published the greatest American study yet made, a nation-wide survey of 25,440 families with incomes of $1200 a year or less, selected in the principal industrial centers and distributed approximately as to industrial population in some 33 different states (1900-02).[3] In about 11,000 cases "normal" families were secured, defined as having "a husband at work, a wife, not over five children and none over fourteen years of age, no dependent, boarder, lodger, or servant, and reporting expenditures for rent, fuel, light, food, clothing, and sundries." Again, in a smaller number of cases, 2567 in all, a more detailed report was secured as to expenditures, and of these 2567 families giving detailed facts, 1043 were "normal families." The data are therefore presented in a series of some 80 tables in six groups: I, Membership of Families; II, Occupation, earnings, non-employment of head of family; III, Income and expenses of families; IV, Detailed expenditures in 2567 families; V, Income and expenditures of 11,157 normal families; VI, Consumption of food in 1043 normal families. The 1900-02 United States Report on Cost of Living marked the beginning of widespread interest in budget studies in America which has persisted and grown up to the present.

This 1900-02 study showed for its 25,440 families an average membership of 4.88 persons, with an average income of $749.50 and average expenditures of $699.24; for the 11,156 "normal families," the average income was $650.98, and the average expenditures $617.80. The latter sum on the average was distributed as follows: Food, 43.13 percent; shelter, 18.12; clothing, 12.95; fuel and light, 5.95, and sundries, 20.11. The table of percentage distribution by income groups among the 11,156 normal families was as follows:

[1] Seventh Annual Report, U. S. Commissioner of Labor, 1891.

[2] Ninth Special Report, U. S. Commissioner of Labor, 1897.

[3] *Cost of Living and Retail Prices of Food.* 18th Annual Report of U. S. Commissioner of Labor, 1903.

PERCENTAGE EXPENDITURES IN 11,156 NORMAL FAMILIES (UNITED STATES BUREAU OF LABOR, 1900-02).[1]

Income Groups	$300	$400	$500	$600	$700	$800	$900	$1,000	$1,100	$1,200
Food	48.0	46.9	46.1	43.4	41.4	41.3	39.9	38.7	37.6	36.4
Rent	18.6	18.5	18.4	18.4	18.1	17.0	17.5	17.5	16.5	17.4
Clothing	10.0	11.3	11.9	12.8	13.5	13.5	14.3	15.0	14.8	15.7
Fuel and Light	7.1	6.6	6.2	5.7	5.2	4.9	4.9	4.9	4.7	4.9
Sundries	16.0	16.5	17.2	19.3	21.6	23.0	23.2	23.6	26.1	25.4
Number of Families	545	1,676	2,264	2,336	2,094	806	684	340	96	168

NOTE: There are omitted from the table 32 families having less than $200 a year; and 115 families having $200 to $300.

This table shows that as income increased in 1900-1902 from $300 to $1200, the food percentage decreased from 48 percent to 36.4 percent; the rent percentage remained in the neighborhood of 18 percent, decreasing from 18.6 percent to 17.4 percent; the clothing cost increased from 10 percent to 15.7 percent; the fuel and light cost decreased from 7.1 percent to 4.9 percent; and the sundries including cultural wants secured a proportion that increased from 16 percent to 25.4 percent.

In 1906 there was issued a Federal Labor report of a limited local group, *Conditions of Living among the Poor,* based on household accounts kept by 19 families in Washington, D. C.[2]

In 1907, appeared Mrs. More's *Wage Earners' Budgets,* a study of 200 families living in the neighborhood of Greenwich House Settlement, New York City, made by the author while a settlement resident (1903-05), a report which combined something of Le Play's intimate knowledge of the families studied with the Engel type of statistical analysis. Mrs. More's families, with an average membership of 5.6, had an average income of $851.38 and an average expenditure of $836.25. She estimated the cost of a fair standard by determining the cost of food for a family of five to be $6.00 a week; assuming that food requires 43.4 percent of income (the average in her families), there would be required for such a standard an income of $720 a year per family of five; or "making allowance for a larger proportion of surplus . . . necessary to provide adequately

[1] *Op. cit.,* pp. 583, 585.
[2] Forman, S. E. U. S. Bureau of Labor Bulletin 64, 1906.

for the future, the income should be somewhat larger, $800-$900 a year." [1]

In 1909, Chapin's *Standard of Living of Workingmen's Families in New York City* [2] presented a remarkable analysis of about 400 family budgets obtained (1907) largely by schedule collectors who went from family to family securing answers to a very extensive series of questions. Families with from four to six children were selected. The Chapin study presented the generalization that in 1907, $800 per year was not a sufficient family income to secure the essentials of a minimum standard of living for working people in New York, that $900 probably was sufficient, and that families trying to live on less than 22 cents per man per day for food materials were probably undernourished. Racial differences were important however, and Bohemians, Austrians, Russians and Italians "on incomes above $700 or $800 began to save and show a surplus"; while Americans, Teutons, and Irish "do not reach the saturation point below an income of $900 or $1000 . . . and the point where saving is preferred to immediate satisfaction is scarcely reached at $1100." [3] The Chapin study has doubtless achieved larger results than any budget study made since Engel's. It has been quoted in wage disputes and as a basis for charity relief. It has stimulated similar studies for which its own figures have often served as a standard of comparison.

Chapin's table of percentage expenditures for incomes from $400 up is as follows:—

CHAPIN—AVERAGE PERCENTAGE EXPENDITURES IN 369 NEW YORK FAMILIES. (1907) [4]

Income Groups	$400	$500	$600	$700	$800	$900	$1,000	$1,100	$1,200
Food	40.8	44.4	44.6	45.6	44.3	44.7	44.7	45.6	45.
Rent	26.8	25.9	23.6	21.9	20.7	19.	18.1	16.2	19.8
Clothing	13.	12.4	12.9	13.4	14.	14.6	15.5	14.9	15.2
Fuel and Light	5.6	5.9	5.8	5.0	5.0	5.1	4.5	3.8	3.8
Sundries	14.6	11.4	13.1	13.1	16.	16.6	17.2	19.5	16.2
Number of Families 369	8	17	72	79	73	63	31	18	8

[1] More, Louise B. *Wage Earners' Budgets.* New York, 1907, pp. 267-270.
[2] Chapin, R. C. *Op. cit.*
[3] Chapin, R. C. *Op. cit.*, pp. 245-250.
[4] *Ibid.*, p. 70.

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A comparison of this New York City table with the preceding table for the whole United States indicates something of the influence of the large city on expenditures. In New York rents on low incomes were above 25 percent, decreasing to the neighborhood of 18 percent as in the country-wide budgets; food costs in New York remain around 44-45 percent in low incomes as well as in higher, Engel's rule of a decreasing percentage to the contrary, the explanation lying in the exorbitant rent percentage on low incomes which makes adequate food expenditure (a high percentage) impossible. The percentages for clothing in the New York and the nation-wide study are about the same, as are those for fuel and light, the former increases with increase of income, the latter decreases with increase of income. A comparison of the allowance for sundries and culture wants—11 to 19 percent in New York City and 17 to 25 percent as averages for the whole country—is a measure of the pressure of city conditions on the opportunity to satisfy anything but physical needs.

A national survey of costs of living in the United States was made by the British Board of Trade in 1909 covering 7616 families in 29 cities particularly with regard to cost of food and shelter.[1]

The standards of a definite industrial group and the difference between what might be called an indecently low minimum standard and a fair standard were considered in a study of the budgets of a small number of cotton mill operatives in three Southern communities and in Fall River, Massachusetts, studied intensively by the United States Bureau of Labor (1907-08).[2] A minimum budget for a family of five for physical necessities alone with no provision for cultural expenses cost $408.26 in the Southern communities and $484.41 in Fall River. A "fair standard" was estimated to cost $600.74 at the South and $731.64 for English, Irish and French Cana-

[1] *Cost of Living in American Towns.* Great Britain, Board of Trade. Summarized in U. S. Bureau of Labor Bulletin 93. March, 1911.

[2] Report on Condition of Women and Child Wage Earners in U. S. Vol. XVI. *Family Budgets of Typical Cotton Mill Workers.*

dian families in Fall River, and $690.60 for Portuguese, Polish, and Italian families in that city.

Miss Byington's study of 90 families at Homestead in the Pittsburgh District (1907-08),[1] made by personal visitation and the keeping of accounts, concluded that "only when earnings are $15 a week or more can we confidently look for a reasonable margin above the requisite expenditure for necessities. It is only in the group spending more than $20 that we find that the average family has reached a point where without being spendthrifts of the future and without undue pinching in other directions they can spend enough to satisfy what we should recognize as the reasonable ambitions of an American who puts life into his work."

Kengott in his social survey of Lowell, Mass.,[2] collected 287 family budgets with an average family income of $15.34 a week which he analyzed to describe the standard of living there. The average budget allowed $10.30 for food, and $2.02 for the rent of an average of 4.4 rooms, 28 cents per week for light and 46 cents for gas.

In 1909-10, budgets of 184 families, almost entirely foreign-born, living in the Chicago stock yards district,[3] showed an average income of $854.13 and average expenditures of $823.98, which included 53.6 percent for food, 13.2 percent for rent, 11.6 percent for clothing, 4.1 percent for fuel and light, and 17.5 percent for sundries. An estimate was given that $800 was the least amount on which a family of five could "live decently and efficiently."

A detailed study of conditions in twenty-three mill workers' families, and of the costs of eleven individuals in Kensington, Philadelphia, made by Little and Cotton in 1913-14, affords intimate views as to their manner of life. The authors suggest

[1] Byington, Margaret F. *Homestead. The Households of a Mill Town.* New York, 1910.

[2] Kengott, G. F. *The Record of a City. A Social Survey of Lowell, Massachusetts.* Macmillan, 1912, p. 129.

[3] Kennedy, J. C. and Others. *Wages and Family Budgets in the Chicago Stock Yards District.* Chicago, 1914.

the content of a fair family standard of living including "for the most part only those things which the majority of Kensington mill-workers' families are striving to attain." This was priced at $1069.94 for a family of five.[1] This study is noteworthy for its graphic details of standards of living. Its contribution of individual budgets should also be noted.

The United States Bureau of Labor studied 1481 white families in Washington, D. C., in 1916, chosen with the main wage-earner's income not exceeding $1800. The average income was $1231.44, and the average expenditures $1216.03.[2] A parallel study was made of 629 colored families, and also a study of wage-earning women.

The Philadelphia Bureau of Municipal Research, collected (1917-18)[3] income and expenditure schedules from 260 wage-earning families and then constructed from the data a fair minimum standard for city employees and priced this standard at various times, finding that it would cost, as prices varied, $1636.79 in the fall of 1918, $1803.14 in November 1919, $1988.32 in August 1920, and $1742.68 in March 1921. This standard list is in effect a quantity-quality minimum, based on local data and drawn up in the hope that the city government might use it in determining wages. The average income in the 260 families studied was $1262.09 and the average expenditure $1261.93, divided as follows: food, 44.1 percent; shelter 14.1 percent; clothing 13.9 percent; fuel and light, 5.1 percent; sundries, 22.8 percent. In the Philadelphia standard budget, the percentage allowances were specified for food, shelter, clothing, fuel and light, carfare and cleaning supplies and services, making up 82 percent of the budget. The exact di-

[1] Little, Esther L., and Cotton, William J. H. *Budgets of Families and Individuals of Kensington, Philadelphia.* Lancaster, 1920, pp. 133-145.

[2] "Cost of Living in the District of Columbia." *Monthly Review of U. S. Bureau of Labor Statistics.* Oct., Nov., Dec., 1917.

[3] Beyer, Davis, Thwing. *Workingmen's Standard of Living in Philadelphia. Bureau of Municipal Research of Philadelphia.* Macmillan, New York, 1919.

A "wage commission" appointed by the Mayor of Dallas, Texas, made a local study, 1917; in New York City in 1915 and 1917, the Board of Estimate made an analysis of costs for the laborer's family.

vision of the remaining 18 percent was not "specified" but it was to cover health, furnishings, taxes, dues, contributions, recreation, education, reading, insurance and miscellaneous, with regard to which it was felt the distribution would vary widely in different families. This Philadelphia study sets an example of method that might well be duplicated in every industrial community—a study of actual family budgets; a standard quantity budget based on the facts of these family budgets; and periodical pricing of the standard budget in local markets to measure variations in the cost of buying this standard living.

War conditions turned the attention of government departments to budget investigations as a way of handling wage disputes in war industries. The United States Railroad Wage Commission in 1917 collected budget estimates hurriedly through newspapers and used these facts with other data in determining wage increases.[1]

The United States Bureau of Labor Statistics made careful studies for the Shipbuilding Labor Adjustment Board, covering about 5000 families in 35 shipbuilding communities in 1917-18;[2] and in 1918-19, it studied 12,096 white families and 741 colored families in 92 communities throughout the country for the National War Labor Board.[3] This latter study is the most recent general survey of American costs of living. The families were selected as those of wage-earners or small salaried workers, which received 75 percent or more of income from the principal breadwinner or others who contributed all their earnings to the family purse. The families had a husband and wife and at least one child not a boarder or lodger; had no boarders and not over three lodgers whether outsiders or chil-

[1] U. S. Railroad Wage Commission. 1917. Report to Director General of Railways. 1918.

[2] "U. S. Bureau of Labor Statistics." *Monthly Labor Review*, March, April, June, Aug., Sept., Oct., Nov., Dec., 1918. See also appendix A. *Family Budgets of American Wage Earners.* National Industrial Conference Board. 1921.

[3] "U. S. Bureau of Labor Statistics." *Monthly Labor Review*, May, 1919, ff. See also appendix B. *Family Budgets of American Wage Earners. Ibid.*

dren living as such. The average income for the 12,096 white families was $1513.29 and the average expenditures $1434.36. Seventy percent of the families had an average surplus of $155, 23 percent had an average deficit of $127, and 6 percent had neither surplus nor deficit. The average expenditures were as follows: food, 38.2 percent; shelter, 13.4 percent; clothing, 16.6 percent; fuel and light, 5.3 percent; sundries, 26.2 percent (including furniture and furnishings, 5.1 percent). From 52 to 518 families were studied in each community, and in half the communities from 78 to 152 families. The localities showing the largest average total expenditures were: Bisbee, $1919.40; Butte, $1843.90; and Steubenville, O., $1758.33. The smallest average total expenditures were in Chippewa Falls, $1167; Cincinnati, $1168 and Evansville, $1169. Of the total average income of $1513.29, in these 12,096 white families of the type selected, 89.2 percent of the total income was contributed by the father; of the total number of families, 8.9 percent had an income from the wife, 18.6 percent from children, 0.7 percent from other dependents, 5.1 percent from lodgers, 44.3 percent from garden and poultry, 73.3 percent had gifts, 11.2 percent had income from rents and other investments and 28.4 percent had other income.

This table of average American costs (1918-19) might be summarized as follows: As incomes increased from below $900 to over $2500, in 1918-19, food costs decreased from 44 to 35 percent of the budget; clothing costs increased from 13 to 20 percent; shelter decreased from 14 to 10 percent; fuel and light decreased from 6 to 4 percent and sundries (combining figures for furniture and miscellaneous) increased from 21 to 30 percent. The outstanding surprise in this table is the large percentage going to clothing; doubtless, partly because war-prosperity was expressed in disproportionate clothing outlay.[1]

[1] Facts from this 1918-19 Federal study may be found in the *Monthly Labor Review* for the following years and months: 1919, May, June, July, August, Sept., Nov., Dec.; 1920, Jan., July, Sept.; 1922, May, Sept., Oct.

AVERAGE PERCENTAGE OF EXPENDITURES: 12,096 WHITE FAMILIES IN 92 INDUSTRIAL CENTERS, UNITED STATES, 1918-19[1]

INCOME GROUP	NO. OF FAMILIES	PERCENTAGE OF AVERAGE YEARLY EXPENSES PER FAMILY FOR:—					
		FOOD	CLOTHING	SHELTER	FUEL AND LIGHT	FURNISHINGS, FURNITURE	MISCELLANEOUS
Under $900.....	332	44.1	13.2	14.5	6.8	3.6	17.8
$900 and under $1,200	2,423	42.4	14.5	13.9	6.0	4.4	18.7
$1,200 $1,500	3,959	39.6	15.9	13.8	5.6	4.8	20.2
$1,500 $1,800	2,730	37.2	16.7	13.5	5.2	5.5	21.8
$1,800 $2,100	1,594	35.7	17.5	13.2	5.0	5.5	23.
$2,100 $2,500	705	34.6	18.7	12.1	4.5	5.7	24.3
$2,500 and over	353	34.9	20.4	10.6	4.1	5.4	24.7
Average, $1,513.29	12,096	38.2	16.6	13.4	5.3	5.1	21.3

In 295 of the 12,096 families the expense for fuel is included in the expense for rent.

"Costs of Living in Coal Mining Towns" (1922), by the United States Bureau of Labor Statistics, shows the average income in 246 miners' families to be $1590; and in non-miners' families, $1686. The miner's average family budget was: food 40.4 percent; clothing 18.4; rent 10.6; fuel and light, 4; furniture and furnishings 5.6; and miscellaneous, 21 percent.[2]

Money budgets versus commodity budgets.—One outcome of the use of budgets in war-time wage adjustments was the drafting of standard commodity budgets, that is, lists of goods and services which might be considered to represent the usual living of American workingmen's families. These were then to be priced in local markets where a wage question had arisen. Early studies of standards of living had secured money facts as to representative costs, usually in the form of average expenditures for the budget items arranged often by income

[1] *Monthly Labor Review*, Aug., 1919, p. 118. Quoted at p. 62 of "Family Budgets of American Wage Earners." Nat. Industrial Conference Board.

[2] *Monthly Labor Review*, April, 1922, pp. 9-12.

groups. Recent studies have emphasized the importance of getting behind money facts to the commodities and services that money buys and hence of stating representative "quantity and quality budgets" which will describe the manner of life which is attained.

Nearing in his *Financing the Wage Earner's Family* (1913) was perhaps the first to emphasize the usefulness of commodity budgets for the light they throw on wage standards, and the uncertainties of using money budgets without interpretative facts as to what the money will buy.

What is such a commodity or quantity budget like? The "Minimum Quantity Budget for the Worker's Family" [1] of the United States Bureau of Labor Statistics lists the kinds of foods and the quantities of each kind to be bought during a year by the average workingman's family of five; the kinds of clothing and the number of items of each kind to be bought; the house is described by the number and size of rooms, by conditions of light, construction, neighborhood, heating arrangements and furnishing; the last by a list of items for each room of the house, with an allowance of seven percent of their original cost for annual upkeep. Finally, this quantity budget includes a list of the necessary miscellaneous items—supplies for laundry work and cleaning, health maintenance, life insurance ($7500), fire insurance, carfares, a newspaper and magazine, contribution to church and labor organization, amusements, and incidentals including tobacco, telephoning, stationery, postage and other miscellaneous items.

Such a commodity budget once established evidently becomes a kind of measure of costs of living since its items can be priced in any community at any time and the cost of all these items becomes the cost of living for that standard of living at the given time and in the given community. Obviously however, what standard list of items is to be chosen in making up a commodity budget becomes a crucial question.

[1] Published as a pamphlet; see also, *Monthly Labor Review*, June, 1920; also in *Standards of Living, A Compilation of Budget Studies*. Bureau of Applied Economics, Inc. Washington, D. C., 1920, p. 1.

Minimum versus comfort quantity budgets.—The standard quantity budget may be based upon a minimum or something above the minimum called variously the fair budget, the comfort budget, the health and decency budget, etc. The United States Bureau of Labor Statistics has suggested three levels: (1) "A pauper or poverty level just above where families receive aid from charity or run into serious debt"; (2) "the minimum of subsistence level based essentially on mere animal existence and allows little or nothing for the needs of men as social creatures"; and (3) "the minimum of health and comfort level . . . providing not only for the material needs of food, shelter and body covering but also for certain comforts such as clothing sufficient for bodily comfort and to maintain the wearer's instinct of self-respect and decency, some insurance against the more important misfortunes—death, disability and fire—good education for the children, some amusement and some expenditures for self-development."[1] The Federal Bureau has developed its quantity budgets in terms of the third level of health and comfort.

Dr. William F. Ogburn in the Seattle-Tacoma Railway arbitration in October 1917 had constructed a minimum comfort budget costing $1505.60 (food cost being 35.4 percent of it). Called to be expert on costs of living for the National War Labor Board, he issued in July 1918 a minimum budget of "the American subsistence level," costing $1386 in New York (food 44.3 percent), and a minimum comfort budget, "on the level above minimum subsistence," for $1760.50 (the food allowance was the same in absolute cost, but was only 35.5 percent of this budget). The United States Bureau of Labor Statistics issued its "comfort and decency budget for the government employee's family," August 1919, costing $2262.47 in Washington (34.2 percent for food), and the revision of this without pricing it, in June 1920 as "the comfort and decency budget for the worker's family." This Federal comfort

[1] "Tentative Cost and Quantity Budget." *Monthly Labor Review*, Dec., 1919. Published also as separate. See also revision in "Minimum Quantity Budget for a Worker's Family on a Level of Health and Decency."

and decency budget for the worker was priced by Dr. Ogburn in bituminous mining towns Jan. 1920 at $2243.94 (food 35.1 percent), and by the Labor Bureau Inc. of New York in a printers' wage adjustment in New York City, Nov. 1920, at $2632.68 (food 33.1 percent). The average allowance for food in these comfort budgets is about 35 percent in three cases and 33.1 percent in one.[1]

Standard budgets requiring a larger percentage expenditure for food, that is representing a lower standard, have also been developed. The best example is the "fair minimum" list of commodities used by the National Industrial Conference Board for making local studies of costs. This list is revised according to conditions in the locality to be studied, for example, local housing conditions are taken into account, and the food and clothing items are "slightly modified from place to place, prevailing means of heating and lighting are taken into account and such of the sundry items as carfare, recreation etc., were varied to meet local conditions." Then this locally adjusted general quantity budget for a family of five is priced in a given community at food, clothing and supply stores. By this method "the minimum American standard" was measured as follows: Fall River, Oct. 1919, $1267.76 (food 45.1 percent); Lawrence, Mass., Nov. 1919, $1385.79 (food 43.3 percent); West Hoboken and Union Hill, New Jersey, Jan. 1920, $1604.15 (food 45.4 percent); West New York, New Jersey, $1616.15 (food 45 percent); Greenville, S. C., Jan., Feb. 1920, $1393.60 (food 53.4 percent); Pelzer, S. C., Jan., Feb. 1920, $1374.09 (food 51.6 percent); Charlotte, N. C., Jan., Feb. 1920, $1438.03 (in company houses), and $1525.67 (in other houses) (food, 53.7 percent and 50.6 percent); Cincinnati, May 1920, $1692.50 (food 42.9 percent); Worcester, Mass., June 1920, $1733.38 (food 43.2 percent).[2] Excluding the three Southern studies, the average of the allowances for food

[1] See comfort budgets, in *Cost of Living Survey*, California Civil Service Commission, Sacramento, 1923: Laborer's family, 1921, $2049.57; clerk's family, 1921, $2991.56; executive's family, $6683.06.

[2] *Family Budgets of American Wage Earners, op. cit.*, pp. 35-36.

was 44.1 percent or 9 percent higher than in the average of the comfort budgets given. Both types of budget have been quoted in wage arbitrations.

Changes in costs of living.—One difficult factor in household expenditures since 1897 has been the gradual increase in the cost of living which led to many official and other investigations in the decade before the war. During the war there were rapid and violent shifts in prices; some items in the budget went higher than others, and since the war the decline in prices has been irregular. The following table, from the National Industrial Conference Board, shows the changes in retail prices as they affect the household for each of the five items in the household budget (columns 2 to 6); in each case comparison of prices at any date is made with prices as they were in July 1914 (except for food where 1913 prices are used as the basis of comparison) and the table shows for different dates the percentage of increase for each item over the 1914 prices. In column one of the table, the general rise in retail prices as affecting all items of the household budget, is shown. Thus (from column one), in July 1917 the cost of living was 31.3 percent above July 1914, that is family expenditures that cost $100 in 1914, would have cost $131.30 in July 1917; and at the peak of the rise, in July 1920, costs were 104.5 percent above 1914, that is, general family expenditures that cost $100 in 1914, cost $204.50 in July 1920. At present at the beginning of 1923 the cost of living has receded to about 55 percent above 1914, but has been showing toward the end of 1922, an inclination to rise again at least in food costs.

The table shows that clothing prices went up first during the war and went up highest, to a maximum of 177 percent above 1914 (that is, clothing that cost $100 in 1914, went to $277); these clothing costs kept highest place until November 1920 since which time fuel and light and sundries, and more recently rents, have been relatively higher than clothing. Rents went up tardily, continuing to rise after other household

costs had begun to come down; in some communities rents are still rising in 1923.

PERCENTAGE OF INCREASE IN THE COST OF LIVING IN AVERAGE AMERICAN COMMUNITIES BETWEEN JULY, 1914, AND JULY, 1922, BY SEPARATE BUDGET ITEMS.[1]

INCREASE IN THE COST OF LIVING BETWEEN JULY, 1914, AND	ALL ITEMS a	FOOD b	SHELTER	CLOTHING	FUEL AND LIGHT	SUNDRIES
July, 1915	0.5%	c	c	3%	2%	c
July, 1916	8.7%	11%	1.5%	20%	4%	4%
July, 1917	31.3%	46%	5%	43%	26%	17%
June, 1918	52.2%	62%	15%	77%	35%	50%
November, 1918	65.0%	83%	20%	93%	40%	55%
March, 1919	60.5%	75%	22%	81%	42%	55%
July, 1919	72.2%	90%	28%	100%	42%	63%
November, 1919	82.2%	92%	38%	135%	48%	75%
March, 1920	94.8%	100%	49%	177%	49%	83%
July, 1920	104.5%	119%	58%	166%	66%	85%
November, 1920	93.1%	93%	66%	128%	100%	92%
March, 1921	68.7%	56%	71%	74%	87%	85%
July, 1921	63.1%	48%	69%	64%	79%	85%
July, 1922	55.6%	42%	65%	54%	74%	72%
July, 1924	61.7%	43%	86%	71%	66%	73%

a. Weighted in terms of the average workingmen's family budget items.
b. Food price increases are computed as increases above average prices in year 1913, not July, 1914. c. No change.

Changes in wages to meet changes in costs.—If wage changes kept even pace with changes in costs, there would be no "high cost of living." The general rule is that prices rise first and that later wages rise. Contrariwise prices fall first and later wages fall. Persons whose incomes are from profits get increased incomes first when prices rise and later wage incomes increase. When prices fall, profit-incomes are decreased and later wages fall. While this is the general principle, there actually result very uneven effects upon personal incomes so that certain incomes are increased and others remain stationary. Miss Winslow's study of New York City incomes in 1918 when the common opinion was that working people generally were getting the benefit of war wages, showed

[1] Research Reports No. 54, National Industrial Conference Board.

that only 40 percent of 377 families had any increase over the income of the preceding year, while 40 percent had the same income and 20 percent actually had less.[1] The practical rule at such times is for all families to try to maintain usual standards and bring appropriate pressure upon employers to raise wages to meet increases in prices

Family costs and wages.—A number of large companies have adjusted wages according to changes in the cost of living. The general plan is to have the men keep records of their family costs of living, and also to secure information from local storekeepers as to prices, and on the basis of these facts secured periodically together with other pertinent facts, make wage readjustments. In one method the change in the cost of living is used as one factor in the formula for determining the wage rate, and adjustments are made automatically by the company. With the rapid rise in prices during the war many employers investigated these changes as affecting their men and made voluntary changes in compensation. During and since the war family budgets have been submitted as testimony in many wage arbitrations.[2]

The National Industrial Conference Board, recently reviewing this use of budget facts in wage adjustments, warns against an attempt to substitute idealized budgets for fact budgets; the substitution for minimum wage budgets of those of higher paid skilled workmen, or "comfort" budgets; the use of budget facts from one community in another where they are not applicable; the use of a five-person family with three small children, when other family types are more common.[3] The United States Railway Labor Board has also recently (1922) protested against the use of "fanciful family budgets" in wage

[1] Winslow, Emma A. *My Money Won't Reach,* Home Economics Committee of Charity Organization Society of New York, 1918.

[2] Babcock's *Taylor System in Franklin Management.* Ogburn, W. F. "Measurement of Cost of Living and Wages." *Annals of American Academy of Political and Social Science.* Jan., 1919.

[3] *Family Budgets of American Wage Earners. Op. cit.* See also: "Family Budgets and Wages by Margaret Loomis Stecker" (of Nat. Ind. Conf. Board). *American Economic Review,* Sept., 1921.

cases and called for determinations of wage rates in terms of "supply and demand."

These statements simply show that care is necessary in using budget facts in wage determinations. Some things are clear. The budget is an educator of public opinion as to what definite wages will buy and so is an important index of real wages. Studies of local standards and facts as to costs of those standards can give locally effective quantity budgets which can be used with entire fairness in wage discussions and general budgets can be adjusted to local conditions for this purpose. Of course, the average number of dependent children in the wage-earner's family cannot always be "three under 14"—but no smaller family group is a safe standard for setting wages. Unless wages are high enough for that type of home, families will be below the poverty line when children are small and society cannot permit that. Further, as these children grow older and themselves earn and help, the continuance of this family wage on the three-child basis will but make possible necessary saving for old age. Society has no right to mortgage the earnings of the child over 14 to bring up younger brothers and sisters, nor can the wife's earnings or income from lodgers be relied upon in a socially acceptable standard. National quantity budgets, provided they represent average national conditions, will be useful in stimulating low local standards, and by adjusting national quantity standards to local conditions they may serve in wage adjustments.

As to whether minimum or comfort budgets should be used in wage discussions, it may be said that both can be used so long as it is kept clear that they are two different standards. The employer will doubtless prefer using minimum budgets and estimating differentials from this base up; labor organizations will prefer the higher comfort budget, estimating differentials up and down. The arbitrating authority may well consider both.

Ogburn points out that standards of living as a basis of wage rates had more attention during the rising price period

up to 1920 than in the falling price period following, and that the wider use of standards depends upon a more general appreciation of the importance of a living wage. Too low a wage must be generally recognised for what it is, "a dying wage".[1]

Ogburn's budget equations.—Dr. Ogburn has derived from a set of 200 Washington, D. C., budgets of 1916, coefficients of correlation for the budget items in relation to family size and income, that is, a set of mathematical indices showing the amount of influence upon the size of the various family expenditures, such as food or amusements, exerted by the two underlying conditions, namely: "size of family" and "size of income." He has further derived a set of equations, one for each budget item, which express the mathematical relationship between size of income and size of family and the item of expenditure concerned.[2] Each equation is composed of three algebraic letters, two of which on the right hand side stand for income (X_1) and for family size (X_3), while on the left side of each equation is the letter standing for the particular item in the budget that in the equation is given a mathematical statement of relationship to family size and family income. Each equation has also as a fourth item, a characteristic "constant," or figure of a certain value. One does not need to know how the equations were derived in order to use them understandingly. They are used by substituting for two of the three letters in the equation actual values from a given family and solving the equation in the usual algebraic method to determine the third factor desired. Here are equations, therefore, by which for a given sized family, say, of father, mother and children of eight, six and four years, with a given income, say, $1500, for which it is desired to know some one item, say, average rent cost, one can quickly get it by solving the rent equation. The rent equation is as follows:—

[1] Ogburn, W. F. "Standard of Living Factor in Wages." *Amer. Economic Review.* Mar., 1923, Suppl., p. 118.

[2] Ogburn, W. F. "Analysis of Standard of Living in District of Columbia in 1916." *Quarterly Publication of American Statistical Association,* June, 1919.

X_5 (percentage spent for rent in a year) $= 22.03 - 0.00125$ X_1 (that is, income for a year in dollars) $- 0.28$ X_3 (that is, size of this family measured in the adult man units of the food scale). This particular family is composed of 3.45 man units. Substituting 3.45 for X_3 and \$1500 for X_1, the equation now reads:

X_5 (or percent for rent) $= 22.03 - (0.00125 \times 1500) - (0.28 \times 3.45)$

Performing the operations indicated:

$X_5 = 19.189$ which is the average percent of total income spent for rent by a family of the size indicated having an income of \$1500.

Suppose the same family has an increase of \$100 in income, how will it affect their rent percentage? The equation will read as before except that \$1600 will be substituted in place of \$1500, and carrying the operations through, the rent percentage will be on the average 19.064 percent or 0.125 percent less than for the \$1500 income.

In a similar way one could work out the rent percentage for families of different sizes and of all different incomes within the range for which the equations hold true, namely, \$800 to \$1800 a year.

Other equations are available similarly for the other budget items, as food, fuel and light, recreation, etc.

These "partial regression equations" as they are called and which are quoted below, enable us to keep the size of the family constant and tell what percentage of increase or decrease for any budget item accompanies a change of income of any amount. Similarly they enable us to keep the size of the income constant and tell what percentage of increase (or decrease) accompanies differences of size among such families. We can tell from these equations what a family of any size with an income of any size (between \$800 and \$1800) spends, on the average, on the various items of expenditure studied in 1916 in the District of Columbia, including food, rent, fuel and light, clothing, etc.

OGBURN'S PARTIAL REGRESSION EQUATIONS FOR BUDGETS, $800-$1800

In these equations:—

X_1 = annual income of family including all earnings, value of garden produce, gifts, etc.

X_2 = deficit or surplus, the difference between income and expenditure; deficit has a minus sign, surplus a plus; expenditure includes unpaid bills.

X_3 = size of family measured in units of an adult male, based on the food consumption scale that:— man = 1; woman = 0.9 of an adult male; child, 11 to 14 = 0.9; child 7 to 10 = 0.75; child 4 to 6 = 0.4; child up to 3 = 0.15.

The following factors represent the annual percentages that the cost of the item concerned is of total family expenditure:—

X_4 = percent for food; X_5 = for rent; X_6 = for fuel and light; X_7 = for clothing of family; X_8 = for all sundries; X_9 = for husband's clothing; X_{10} = wife's clothing; X_{11} = children's clothing; X_{12} = insurance; X_{13} = religious expense; X_{14} = furniture and furnishings; X_{15} = "education," including books, papers; X_{16} = amusement; X_{17} = liquor and tobacco; X_{18} = for sickness; X_{19} = total clothing expense in multiples of the amount spent for husband's clothing and found by dividing the expenditure for the man's clothing into the total clothing expenditure; X_{20} = food cost per adult male per day, found by dividing the total yearly family food bill by 365 and then dividing by the number of equivalent adult males in food consumption in the family.

PARTIAL REGRESSION EQUATIONS

(1) $X_2 = -82.70 + 0.14921X_1 - 26.31X_3$ (Deficit and surplus)

(2) $X_4 = 47.00 - 0.01158X_1 + 1.88X_3$ (Food)

(3) $X_5 = 22.03 - 0.00125X_1 - 0.28X_3$ (Rent)

(4) $X_6 = 7.00 - 0.00134X_1 + 0.066X_3$ (Fuel and light)

(5) $X_7 = 5.29 + 0.003407X_1 + 0.449X_3$ (Clothing)

(6) $X_8 = 19.00 + 0.01008X_1 - 1.94X_3$ (Sundries)

(7) $X_9 = 3.88 + 0.00134X_1 - 0.50X_3$ (Husband's clothing)
(8) $X_{10} = 2.69 + 0.00185X_1 - 0.66X_3$ (Wife's clothing)
(9) $X_{11} = -1.17 + 0.000286X_1 + 1.58X_3$ (Children's clothing)
(10) $X_{12} = 4.20 - 0.000163X_1 + 0.026X_3$ (Life insurance)
(11) $X_{13} = 0.41 + 0.00054X_1 - 0.034X_3$ (Religion)
(12) $X_{14} = 2.95 + 0.00101X_1 - 0.353X_3$ (Furniture)
(13) $X_{15} = 0.13 + 0.00059X_1 - 0.0062X_3$ (Education)
(14) $X_{16} = 0.58 + 0.00079X_1 - 0.141X_3$ (Amusement)
(15) $X_{17} = 4.20 - 0.00076X_1 - 0.456X_3$ (Liquor and tobacco)
(16) $X_{18} = 4.20 - 0.00033X_1 - 0.233X_3$ (Sickness)
(17) $X_{19} = 1.01 - 0.00019X_1 + 0.857X_3$ (Equiv. ad. males in clothing expenditure)
(18) $X_{20} = 0.47 + 0.000148X_1 - 0.071X_3$ (Food expenditure per man per day)

These equations give a quantitative statement to Engel's principles of consumption. Equation 2 shows that as income grows the food decreases as a percentage cost, thus agreeing with Engel's principle. Equation 5 shows that the clothing percentage increases with income, which does not agree with Engel's law that clothing cost remains approximately the same. Engel's next law that rent, fuel and light are unchanging percentages is also not upheld, for equation 3 shows the rent percent to decrease with income, and equation 4 shows the percent for fuel and light similarly to decrease. Engel's fourth law was that of a constantly increasing percentage for sundries and equation 6 states the same fact for these budgets.

The Ogburn equations also enable one to reduce data from different cities and sections to a common denominator of the same sized family and the same sized income in the two places and so permit direct and accurate comparisons of the cost of living in different communities.

The effect of a growing income with unchanging family membership, or of increasing family membership with a static

income, upon any item of expense or upon all can also be worked out. A good illustration of such use is Ogburn's own study of the financial cost of bringing up a child (see Chapter XV).

Budget studies of individuals.—Miss Bosworth's *Living Wage of Women Workers,* the first extended study of non-family women, covering 450 women workers in Boston (1906-09), placed their living wage at approximately $10 a week or $500 a year.[1] Working girls' budgets had earlier been collected and used by Mrs. Clark and Miss Wyatt in discussing the problems of the working girl.[2]

Budgets of eleven selected individuals in Kensington, Philadelphia, two unmarried young men and nine unmarried women, were collected by Cotton and Little[3] who suggested a fair standard for a woman textile worker with no one dependent upon her for support for one year (1913 or 1914) to require $563.20, of which room and board were $273.

The United States Bureau of Labor Statistics made a study of 600 women workers in Washington, D. C., in 1916, of whom 46 percent had less than $400 a year and 64 percent had less than $500 a year.[4] The same Bureau drafted in 1919 a "Quantity Cost Budget" necessary to maintain the single man or woman in the clerical service of the government at Washington, which was priced at $961.41 for the single man and $1037.20 for the single woman, or on adding 10 percent for savings and insurance, $1057.55 for the man and $1140.92 for the woman.[5]

The National Board Y. W. C. A., New York, has issued standard budgets for the employed young woman.[6]

[1] Bosworth, Louise M. *Living Wage of Women Workers.* A study of incomes and expenditures of 450 women workers in Boston. Longmans, 1911.

[2] Clark, Sue A. and Wyatt, Edith. *Making Both Ends Meet, the Income and Outlay of New York Working Girls.* New York, 1911.

[3] *Op. cit.,* p. 163 and pp. 230-238.

[4] "Wage Earning Women in District of Columbia," *Monthly Labor Review:* "What They Are and What They Do," January, 1918; "Their Clothing," February, 1918; "Food, Housing and Sundries," March, 1918; "How They Spend Their Money," April, 1918.

[5] *Monthly Labor Review,* Jan., 1920, pp. 35-44.

[6] Woman's Press, 600 Lexington Ave., New York City.

A careful investigation of the old age problem of women teachers has just been made under the direction of Miss Eaves who is continuing the study of the problem.[1] Entirely inadequate provision for retirement is the most general fact disclosed.

Individual scale for consumption.—Sydenstricker and King[2] have derived a scale that expresses the relative budgetary consumption of persons of different sex and age, which makes it possible to express the total relative consumption of a family or other group in a quantitative way and hence classify or compare families or other groups according to consumption and to income.

The unit of the scale is called an ammain or expense for adult male maintenance for food, clothing and all other expenditures which are individually demanded. This scale which was based on studies of families in Carolina mill towns takes into account 91 percent of the family expenses. The relative expenditures in ammains for persons of different sexes and ages are as follows:

TABLE OF AMMAINS FOR AGE GROUPS. (SYDENSTRICKER AND KING, 1920.)

AGE GROUP	MALE	AGE GROUP	FEMALE
Under 2	0.2	Under 2	0.2
2 to 4	.3	2 to 4	.3
5 to 9	.4	5 to 9	.4
10 to 12	.5	10 to 12	.5
13	.6	13 to 14	.6
14 to 15	.7	15 to 18	.7
16	.8	19 to 36	.8
17 to 18	.9	37 to 64	.7
19 to 35	1.0	65 and over	.6
36 to 55	.9		
56 to 75	.8		
75 and over	.7		

[1] *Old Age Support of Women Teachers.* Provision for old age made by women teachers in the Public Schools of Massachusetts. Department of Research, Lucile Eaves, Director, Women's Educational and Industrial Union. Boston, 1921.

[2] *A Method of Classifying Families according to incomes in studies of disease prevalence.* Edgar Sydenstricker and Wilford I. King. Reprint 623, U. S. Public Health Reports, 1920.

Applications of budget facts.—The attention just given to budget facts in relation to wages must not divert attention from their primary use in improving home management. Family financial facts are the central data for better household management as, Richards, Terrill, Richardson, Taber, Frederick, Donham, Lord and other writers have shown.[1] The remaining chapters of this book are concerned with applications of budgeting to the different divisions of household administration. Trained workers in several fields are making practical use of household budget facts. The teachers in public schools are the most numerous and direct workers, and various special texts are available for their purpose.[2]

Home demonstration agents and rural extension workers have developed household account books and project methods for teaching budgets.[3]

Social work for ten years or more has made use of home economics specialists to guide in the kind and amount of relief given to needy families, and Gibbs, Gillett, Nesbitt, and Winslow have made special contributions in this field.[4]

[1] See Richards, Ellen H. *Cost of Living, Cost of Food, Cost of Shelter, Cost of Cleanness.* Terrill, Bertha. *Household Management.* Richardson, Bertha I. *The Woman Who Spends.* Taber, C. W. *Business of the Household.* Frederick, Christine. *New Housekeeping, Household Engineering.* Donham, S. Agnes. *Spending the Family Income.* Lord, Isabel Ely. *Getting Your Money's Worth.*

[2] Brookman, T. A. *A Family Expense Account including Problems of Investment and Expenditure.* Heath, 1914. Sheaffer, William A. *Household Accounting and Economics.* Macmillan, 1917. Ball and West. *Household Arithmetic.* Lippincott, 1920. Taber and Wardall. *Economics of Family.* Lippincott, 1923. See also *Journal of Home Economics,* Oct., 1918; Nov., 1918; April, 1919; April, 1920; June, 1920.

[3] See among others, publications of Department of Home Economics, Cornell University; University of Texas and the State Agricultural Colleges of Massachusetts, Michigan, Delaware, Oregon, Iowa, Illinois.

[4] Gibbs, Winifred S. *Lessons in Proper Feeding of Family,* 1909. Gibbs, Winifred S. *The Minimum Cost of Living.* Macmillan, 1917. Gillett, Lucy H. *A Food Primer for the Home;* New York Association for Improving Conditions of Poor. Nesbitt, Florence. *Household Management.* Russell Sage Foundation, 1918. Nesbitt, Florence. *Chicago Standard Budget for Dependent Families.* Chicago Council of Social Agencies. Winslow, Emma A. *Budget Planning in Social Case Work.* Charity Organization Society, New York, 1919. *Good Nutrition and Adequate Food Allowances for the Family,* New York Nutrition Council. Nesbitt, Florence. *Standards of Public Aid to Children in Their Own Homes.* Washington.

A recent development in budgetry is the home economics bureau of budget information in banks. A score or more of such "savings service" bureaus have come into existence following the example of the Society for Savings of Cleveland.[1]

Finally, as budget study began in the attempt to solve the problems of poverty and social welfare it is interesting to note that broad applications of budget facts are still being made. The surveys of budget studies by Streightoff, by Nearing and by Comish illustrate this fact [2] and the writings of Edward T. Devine in America and B. Seebohm Rowntree in England [3] may be cited as examples of numerous others who expound the fact that normal family life bottoms itself on a sound household economics, that is, an adequate income wisely used.

ADDITIONAL REFERENCES

King, Clyde L. *Lower Living Costs in Cities.* New York, 1915.
Nystrom, P. H. *The Economics of Retailing.* Ronald Press, 1919.

[1] Progress in this field is being reported in the *Journal of Home Economics, Savings Bank Journal* and *Journal of American Bankers Association.*

[2] Streightoff, F. H. *The Standard of Living among the Industrial People of America,* Boston, 1911. Nearing, Scott. *Financing the Wage-Earner's Family.* New York, 1913. Comish, N. H. *The Standard of Living,* Macmillan, 1923.

[3] See E. T. Devine. *Principles of Relief, Misery, The Normal Life, Social Work,* et al. See B. Seebohm Rowntree. *Poverty, How the Labourer Lives, The Human Needs of Labour,* et al.

CHAPTER IV

HOUSEHOLD CAPITAL AND SAVINGS

The household requires a capital investment just as does any business undertaking, and this capital is first started, and later augmented, by the process of saving, or transferring part of one's current income into a permanent form, rather than using it all up in present consumption. This chapter will discuss the nature of household capital, including material capital goods and capital investments put into the personal equipment of members of the family; next, the creation of household capital through household saving, the reasons for such saving and its social effects; finally, the chief institutions for savings are described. In the following chapter the common forms of investment and of life insurance are discussed.

Nature of household capital.—Household capital has been already described as including all industrial products used in the family for the family living—the house itself and all its material contents, both (a) productive or working equipment of tools, utensils, materials, supplies, and the like, and also (b) consumption goods for the immediate satisfaction of human needs, as food, clothing, rugs, pictures, chairs, beds, and the like. Under both production and consumption capital may be distinguished items relatively permanent in form, as the kitchen range and the fireplace, called in economic theory "fixed capital" and items which perish in a single using, as laundry soap and fuel, called "circulating capital," which must be constantly renewed. Since the household is primarily a personal institution, it seems useful to also include in our concept of household capital (c) those personal qualities of its members which are the result of investment of funds in edu-

cation and the like. There is also to be included in the family possessions (d) outside productive property as a farm, or an investment representing such property as a bond or stock.

Money as capital.—It is a common error to think of business capital and of household capital as the fund of money which one has. The error lies in confusing concrete capital goods themselves and their money value. The use of the term "capital goods" for the concrete materials, tools, equipment used in production, and "capital value" or "capital" for their money value would clear away the difficulty, although "capital" is used for both ideas. One's stock of money is an important item of his capital goods, and the amount of one's money counted in with the value of all his other possessions equals his capital value.

There is the further point that in the growth of capital goods the tendency is for them to pass through the money form. Part of household money income is "saved," that is, put into some permanent form, as durable consumption goods or production goods inside the home or out, or an investment in personal training.

All these forms of saving increase the real income of the household, whether in the form of a larger money income that may as desired be turned into satisfactions, or in the form of an immediate increase in the goods and services for current use by the family. The practical point is that by conserving part of present money income the household increases its "stock," or the capital that continues through the future to increase the family's real income. Some capital in the household results from direct saving, without the intervention of money, as where a householder builds some serviceable convenience as a homemade kitchen-cabinet, yet here parts of the product are secured by purchase in the market and require money saving.

Family property.—While there is no census of family property, the following are some pertinent facts:

Nearly one-half of families reported in the 1910 Census (49.5 percent) live in homes of their own, valued from perhaps a hundred dollars, more or less, up to thousands of dollars each. King estimated that in 1910 urban residences in the United States were worth about seventeen and a half billions of dollars, and farm residences about two and a half billions;[1] or about twenty billions for the homes of the 20,255,555 families. This would be an average of not quite $1000 per house, or of about $1330 for urban residences, and about $340 for farm residences. The figures of 1910 would be equivalent in 1922 to about $1650 for the average home, $2200 for the average urban house, and $560 for the average farm house.

All but a very small fraction of families own their household furniture and furnishings. King estimated in 1910 that furniture with carriages and automobiles were worth 6.7 billion dollars;[1] which would be an average of $331 per family. This would be equivalent to probably at least $580 to-day, without taking account of the additional automobiles now owned. The United States Bureau of Labor estimated for the government clerk's family in 1919 that their necessary household furniture and equipment would cost $1000 to buy and 6 percent per year for maintenance.[2]

Personal clothing, the universal property, was estimated by King to be worth three billions of dollars in 1910.[3] This would give $148 per family of five persons, or brought up to 1922 values about $260 as the average inventory value of all clothing owned by a family.

The automobile is a most interesting item of consumption goods at present, and in 1922 there were over ten million automobiles in the United States, and one authority estimates that fifteen million cars will ultimately be owned.

[1] King, W. I. *Wealth and Income of the People of the United States.* Macmillan, 1917, p. 259.

[2] *Tentative Quantity and Cost Budget.* U. S. Bureau of Labor Statistics, pp. 59-64.

[3] *Op. cit.*, p. 259.

The total value of consumption goods in the United States was estimated by King to be $284 per capita in 1910, or for a family of five $1420. There had been an increase from $72 per capita in 1850 to $94 in 1860; a reduction to $70 per capita in 1870 as a result of the Civil War, then constant increase in the succeeding decades to $145, $213, $269, and finally to $284 in 1910. The increase in prices would make this amount probably 50 percent greater, or equivalent to, say $426 in 1922. In addition, there has been a considerable increase in actual consumption goods—the automobile particularly which would raise the present figure still higher.

There is no record which shows the number of owners of securities, stocks, bonds and the like. It was estimated that before the war they might be numbered by the hundreds of thousands—probably less than one million all told. The popular sales of Liberty Bonds increased the number of security owners into the millions.

There is, of course, much "centralization of wealth," that is, ownership of a large part of the property by a limited number of individuals. King's analysis shows, however, that there is less centralization in the United States than in other countries. The poorest 65 percent of the population in different countries, own the following parts of the total wealth: Prussia, 4.9 percent of total wealth; France, 4.3 percent; United Kingdom, 1.7 percent; State of Wisconsin (for which facts are available), 5.2 percent. The richest 2 percent of the population own the following parts of total wealth: Prussia, 59 percent; France, 60.7 percent; United Kingdom 71.7 percent; Wisconsin, 57 percent.[1] An accurate statement of property distribution as affected by the war awaits statistical analysis.

Investment in self, psychological property.—There remains a kind of capital, not, indeed, reckoned as such by the economists, but of the greatest importance to the individual and the family, namely, all the investment in one's self

[1] King, W. I. *Wealth and Income. Op. cit.*, p. 96.

that increases personal capacity as regards health, general education, and specific vocational skills of the market and the home. In considering the real or vital income of the household all that has been expended on personal improvement and that increases the productive capacity of the man in his outside employment and of the woman in her household work and management, may be accurately called part of the family capital. Hence, the importance of raising the school age, of holding young people in the general schools as long as possible, of providing for continuation schools, of part-time study while at work, and of making these opportunities compulsory for both young men and young women, up to 18, if not, indeed, up to the legal majority, and of continuing education into adult years. Investment in self can be made intelligible even to the school child. It should be a driving motive with young people in the ten years after present schooling is completed. Specifically, it means expenditure for vocational training, for vocational books and magazines, for attending local vocational conferences and all others that the purse can stretch to cover, and all other means of increasing efficiency. "Vocation" here means both wage-earning and housekeeping and homemaking. Here, the plea is particularly for the personal training that will give to every one a wholesome satisfying life experience in the home, and this is an investment to be made to some extent in the man as well as the woman of the family. This psychological capital for an all-round successful family membership is perhaps even more important than the material capital of money and goods for the successful launching of the household enterprise. Like material capital it can be added to by the process of saving and investing, but here the investment is in one's self and one's inner equipment.

How is household capital secured?—The initial capital includes (*a*) whatever the man and the woman bring into the partnership and whatever is given by relatives and friends in starting the new home; and this is increased in succeeding

years (*b*) by the savings of the family out of their current income, and (*c*) by special gifts and inheritance.

As to the initial capital of the new household our concept of the "hope chest" has widened and we have a new American ideal, that it is the business of the young man and young woman alike to make solid preparation for the expected home. This preparation should consist of three material items: money, household furnishings, and clothing; and the personal training and equipment referred to, all of which are to be secured by savings. The modern standard would make savings a regular practice among young wage-earners, men and women alike, both for their own security and progress as individuals, but equally that they may have an adequate joint capital for starting a home when they marry, and for financial security and happiness if they do not marry.

Savings is usually thought of as a money fund, or as money put into the bank or some special type of investment. We need, also, to recognize that the accumulation of useful property is savings. Here is a practice which every boy or girl should be led to initiate—the occasional purchase of household furnishings of solid and lasting worth. The Boys and Girls Clubs of the Agricultural and Home Economics Extension Service have sometimes used as a project the furnishing of one's own room, and have encouraged members to invest their savings in a rug, or chair, or picture for their own room, thus stimulating a wholesome interest in present improvement of living conditions, and, also, laying a foundation in ownership of household furniture for a later home. The purchase of clothing of semi-permanent worth, such as substantial overgarments of solid choice fabrics, or apparel for dress occasions is another possibility.

How much in money's worth should this initial capital be? Shall one commend the example of the boy who said, "I won't marry till I have $1000 ahead"? The answer depends, of course, upon the scale of income and standard of living contemplated by the young couple concerned. A reasonable

standard would seem to be that the young couple have ahead the equivalent in cash and outfit, of at least one-fourth to one-half the annual income on which they expect to live, or $400-$800 ahead before marriage on a $1600 income, and $750-$1500 on a $3000 income. If both have earlier accepted the standard of saving at least one-tenth of their income, the necessary savings can be made in perhaps two years and probably less, as their joint money income should be larger than the money income of the man alone after marriage. It should be possible for young people who start working at 18 to save on a reasonable scale for 3 to 5 years, and college graduates similarly for a couple of years, and have then a sufficient nest-egg to justify building the nest to put it in.

The custom of giving as wedding gifts articles of permanent worth should be commended as providing for the new home something of "the start in life," which in other countries the parents give under the dowry or dot system. American families that can afford to do so, often give a house, or the furnishings of a house at such a time, and presents of furnishings are, of course, common. With well-to-do farmers a farm, or its equivalent, has often been a wedding gift. We need a convention that will encourage the giving of articles of every-day utility, including that common term of all commodities, money, which the young couple can then use as the situation demands in obtaining their initial outfit.

Inheritance, or the transfer of property from one generation to the next, is one method of acquiring household capital, and operates with regard to real estate and personal property. Included in the latter, in addition to money and securities, are furniture and other articles of household furnishings. A strong social argument for the purchase of fine pictures, Oriental rugs, mahogany furniture, hand-made laces, tapestries, and the like is that such items will serve not only the purchaser, but may, also, be ultimately transferred and become valued items in the homes of the next generation.

Inheritance is often in terms of money, and where money is

thus received it should be considered an addition to the family capital, to be invested in securities, or in articles of permanent worth, and not considered as a part of current income and used up for the present day's needs. The encouragement of family capitals of a few hundred dollars even among wage-earning people, to serve as a reserve, if necessary, in some great emergency, but normally to produce its income to be added in part to principal, and in part used for some special expenditure, can become a social policy of great significance.

The securing of household capital by household saving from current income must remain however the principal method of accumulation.

Reasons for household saving.—Saving is a means of securing a better long-view adjustment of household income and expenditure. To-day's income may be sufficient for to-day's need, but no man can be sure of to-morrow: it may bring increased need or decreased income, or both, and savings enables one to meet such a situation by carrying over part of present income to future needs. The future situation may, of course, by good fortune, bring an increased income which would make savings unnecessary—but, in the uncertainty, the rational person will, so far as possible, insure his future by saving.

The financial emergencies for which the household should make preparation by saving include:

Decreased income through any cause, as unemployment, reduced wages, sickness, accident, industrial depression, labor troubles, climatic conditions, old-age invalidity, and other causes.

Increased expenditures made necessary through loss by fire, robbery, etc.; sickness of any member of family, and special health expenditures, as for dentistry, glasses or surgical operations; care of dependent relatives, or friends; birth of children; education and start in life of children; cost of moving one's home, or unusual repairs to one's own house; death and funeral expenses.

Not only "rainy-day" needs, but the "sunny opportunity" of some unforeseen situation, such as the opportunity to buy a home, to embark in business, or make a turn in one's affairs, can be successfully met only by the person who has a financial reserve accumulated by saving and available for the fortunate turn in affairs that may come as well as the dreaded emergency.

Such have been traditional reasons for saving—to prepare for the unpleasant, and, indeed, the pleasant, but the unseen contingencies of life. There is a new gospel of savings, however, that the family should "save to spend," that is, that interesting goals be set up of a concrete and definite character, rather than of the indefinite emergency type just mentioned, and that these are to be reached by a program of temporary accumulation. The buying of a home, a fund for a child's education, the purchase of a car, a piano, better working equipment in the home, are all illustrations of this use of saving to the achievement of definite worth-while goals.

That saving increases income by the amount of interest on investment provides another goal to which some people respond.

Accumulation to establish a family fortune is a motive of which economists have made much, and a motive of which America will see more in the future as the ready opportunities of a new land are taken up and the Old World necessity that parents erect economic safeguards for their children, and even more remote descendants, becomes operative here.

Social results of saving.—The household saving of money is of national and, indeed, international concern. Thrift which makes it the habit to save, enlarges society's working capital, and thereby increases the nation's productive power and so gives it a larger part in the world of commerce. Take two communities—"Budget-Town" and "Haphazard." In Haphazard everybody spends as much as they earn, and as fast as they earn it, without any plan for future needs, or any system of saving that organizes one's own life as an orderly process. If in Budget-Town every family saves before it spends and plans its spending intelligently, this is not only a

benefit to individuals, but also to society generally. For, as has been pointed out, family saving and spending determine:— "What proportion of the productive power of the country is used in producing goods for immediate necessity; what proportion is used in producing durable consumption goods; what proportion is used in producing new equipment for the increase of the country's productive power, and what proportion is used in producing goods for other countries. The increase in the future productive power and the prosperity of the country depend upon how much of the present productive power is used in producing new and better industrial equipment; and this, in turn, depends upon how much of the income of the present is invested, that is, used in the purchase of producers' goods."

Any increase in family saving tends to improve the condition of labor. First of all, it means that there is just as much spent in the present time, either by the saver, personally, who puts his savings into permanent goods, or by some productive enterprise into which the saved money goes by the avenue of the savings bank, or other thrift institution. There is as much spent, only the spending is likely to be for permanent capital goods, not temporary consumption goods. Hence, savings make work. Further, the increase in social capital tends to improve the future position of labor, either by increasing money wages through the improved productivity due to increased working equipment, or by reducing the prices of what the worker buys due to the increased product put upon the market.

Any increase in family saving helps business, even retail trade. The family that saves does not over-buy and extend credit so that it becomes a slow-paying, or even defaulting purchaser. The family that saves tends to remain a steady buyer in time of business depression. The family that saves gradually increases its money income, and spends more in the long run than if it were to spend every dollar as received.

A community or a nation of families that generally save will be a community or a nation that shows all kinds of

progress—economic primarily, but, also, progress in education, in health, in housing, in art and literature and all cultural interests. Using up wealth as soon as produced results in economic stagnation. Progress can come only as part of to-day's productive energy goes to providing better working equipment, so that to-morrow's production will be greater than to-day's. But saving must continue to-morrow lest stagnation occur on to-morrow's level. Hence, saving is a permanent essential in any program of individual, community, or national progress.

Savings in the standard of living.—Every American individual and family of average efficiency can and should save something regularly from wages or salary; and conversely, even minimum wages should be high enough to permit some small savings in addition to life insurance. This principle is true, because every one has not only seasonal needs, recurring within the year, such as fuel, clothing and taxes, which require temporary saving, but also, because every one has unpredictable emergency wants, for example, sickness, unemployment, family costs, the reduced earnings of old age, and death charges that must be met out of savings from the personal purse. Therefore, those State Minimum Wage Commissions which include a savings item, as well as insurance in the minimum budget, are unquestionably correct, as in the case of the Massachusetts 1920 budget of $15.30 a week for the working girl which allows twenty cents a week for savings in addition to ten cents a week for insurance. The statement of the National Industrial Conference Board that "provision for saving cannot, of course, be legitimately included as an item in the cost of living" [1] seems unjustifiable. Rather, savings cannot be legitimately excluded from the minimum wage. To be concrete, we may say that our American standard of living must make it possible for the family to have a reserve fund accumulating at the rate of at least a dollar a week, or $50 a year, although the exact sum is subject to more precise determination. The development of

[1] *Family Budgets of American Wage Earners.* Century Co., 1921, p. 44.

thrift institutions to conserve such savings is a necessary adjunct to the savings wage.

The amount of savings.—The amount of new capital saved in terms of money in any year is the measure of saving from personal and family income. The amount needed for new capital equipment in the United States in 1921 was estimated at six billions by Paul and Dorothy Douglass,[1] who have also suggested a scale of saving necessary at various incomes to provide this amount. Beyer's figures for 260 workingmen of Philadelphia (1918) are perhaps typical for city working people, and they show that, while life insurance is carried on the smallest income, there was no certain surplus (aside from the insurance) until an income of $1800 was reached. With incomes of $900 he found an average of $31.65 a year paid for life insurance. This annual premium increased to $74 at $1900 a year. The families on lowest incomes had (aside from insurance payments) an average deficit, an average surplus appearing in the $1100 to $1300 group; then deficits and surpluses alternate until at $1800 a surplus definitely appears. By adding together algebraically the surplus or deficit and the life insurance, there is a net sum set aside for every income group from the lowest up, growing rather regularly from $.08 at $900 a year to $157 at $1900.

Amounts saved at various income levels are not known, but certain standards for saving are suggested in the concluding chapter on Handling Household Resources.

Institutions for Saving

The checking account.—A bank account in a commercial bank in which all money received is deposited and from which withdrawals are made by check is the first step toward saving, since balances can be accumulated in such an account and transferred to a savings account. The checking out of the regular savings sum as the first "bill" to be paid weekly or

[1] Douglass, Paul and Dorothy. "What Can a Man Afford?" *American Economic Review.* Supplement, Dec., 1921.

monthly and transferring it to an interest account has regularized saving and investment for many. Interest on checking account balances is to be secured where possible.

Savings banks aim at promoting thrift among the people by receiving small deposits to be invested at a rate of compound interest set as high as possible, having in view a high degree of security of the principal. Such banks usually pay 3 to 4 percent, and where operating under sound legal standards, form the most desirable method of caring for the surplus money of the household, of accumulating for some distant future, or for equalizing income through a year, or between years. Their prime purpose is to care securely for funds; the rate of interest paid is a matter of secondary importance.

There are three general types of savings banks in the United States: First, the "mutual" or "trustee" savings bank found in New England and New York, chiefly, of which there were 623 in 1921 with deposits of over five billion dollars. This type is managed by a self-perpetuating board of trustees, who by law must pay in dividends to depositors all net receipts from investments. Second, the more numerous "stock company" or private savings banks of which there were 978 in 1921 with deposits of 443 millions, which are conducted in other states as a profit-making enterprise by their stockholders, to whom belong all net profits after paying to depositors the dividends agreed upon. Third, there are the interest or savings departments which many national, state, and private banks, and trust companies maintain, which approximate the second type of savings bank in character. In some states, such a savings department must be segregated from the commercial business in its bank, and savings deposits may be invested, as in mutual banks, only in limited types of funds, and there is a growing demand for general legal requirements to this effect. The savings department in the commercial bank, and the stock company savings bank have each a factor of risk, in that the stock holders' desire for net profits might lead to less secure

investments for the sake of large income. The obvious safeguard is legal restrictions as to permissible investments and supervision by state banking authorities, and these are found in many states.

All three types might be welcomed in any state, although certain states restrict the separate "savings" bank to the mutual or trustee type, and where a state has adopted this type it is doubtless only fair to protect it reasonably against competition of private banks. Massachusetts is extending savings banks intensively by permitting trustee banks to open branch offices for receiving deposits anywhere within fifteen miles of the bank, in communities where there is no savings bank. Banking by mail within a community and elsewhere widens the reach of a savings bank.

Savings banks are extending their services (1) in an increasing number of cases by household budget and savings information bureaus in charge of home economics and thrift experts, who are ready to advise on personal and family expenditures and savings; (2) by industrial savings methods aiming to reach the wage-earner at his place of employment; and (3) by school savings which reach the child at the school both with thrift instruction and with the opportunity to save. The family purse should have the service of these outposts of savings—in the school bank, in industrial savings, and in the thrift bureau.

Banking facilities might, also, be extended by removing the limitation on the size of the account often found in trustee savings banks. Accounts in trustee banks are often limited by law on the theory that the bank is intended to benefit the person of small means; but persons with a larger capital can evade the restriction by depositing in several banks, or by opening several accounts in the names of other members of the family in a single bank. A restriction of the amount of the individual account is, also, sought sometimes by allowing a higher rate of interest on the first $500 or $1000 deposited, than upon the balance; also, by restricting the amount to be

deposited in a single month. All these restrictions, based upon the idea that a person with $3000 to $5000 should be able to invest securely himself, and may not fairly have the aid of this semi-philanthropic institution, seem of doubtful social value. Stock savings banks have no restrictions upon individual accounts (the larger the account the more the net profit); but total deposits in the bank are properly limited by law, as, for example, in Iowa to ten times the capital stock.

No introduction is required for opening a savings account. The intending depositor is often asked to write answers to certain questions, for example, his mother's maiden name, which later serve for identification. Deposits are usually required to be in the form of money (although checks drawn payable to the bank are acceptable in deposits by mail). A pass book is given the depositor, and in it are entered the deposits, credits of interest declared on deposits, and withdrawals. Deposits may be made at any time, but interest is computed for sums remaining for a minimum period, usually three or six months from the first of January, April, July, and October. Sometimes, deposits up to the tenth of the month count as from the first. Interest is credited at definite periods, as on the first of January and July, and is then added to the principal on deposit, and if left on deposit thereafter, itself draws interest, i.e., interest is compound rather than simple. Withdrawals from a savings account require notice to the bank, 30, 60 or 90 days in advance; the bank usually waives the requirement of a notice, but may, at any time, put it into effect, as in a time of financial stringency or threatened "run." The amount withdrawn may be limited, also, as to $1000 in a single month by the by-laws. Such banks invest their funds in securities, and carry only a small cash balance in hand; extraordinary withdrawals, therefore, necessitate the sale of securities which requires time, if loss is to be avoided. A savings account may not be checked against, as is an ordinary checking account in a commercial bank, but withdrawals must be made by the depositor in

person, or on his written order, accompanied by the pass book. Accounts may be opened jointly by two persons, either of whom may deposit or withdraw, as, for example, "John Smith or Jane Smith." If the phrase, "or survivor" is added, in the case of decease of one person, the other controls the funds without the usual court order necessary in settling an estate. Accounts may be opened by one person in trust for another; then if the trustee dies, the account is payable to the person for whose benefit the trust was created. A minor's deposit is held for his sole benefit. If the pass book is lost, immediate notice should be given the bank, as payments made upon presentation of the book discharge the bank from responsibility. Savings bank pass books, therefore, form a kind of security, for example, commercial banks and savings banks themselves accept them as collateral for loans, in this event, taking over the pass book and notifying the savings bank that the book is held as security. The advantage of such an arrangement is that one's savings deposits continue to draw interest, computed on the basis of an unbroken six-month period, while the person serves his temporary need of funds by a short time loan at interest. Certain savings banks are trying the experiment of crediting interest for each month funds are on deposit, and receiving deposits at any time. This is an equitable arrangement which should stimulate deposits so as to pay the additional cost of book-keeping.

The savings bank method of saving is for the average person safer than investing one's money privately. The advantage of the bank method lies in this: first, one's money is being handled by experts, not by an amateur; further, even if one or more investments made by the bank are losses, the loss is offset by the great bulk of successful investments, and makes a scarcely noticeable difference in the rate of interest earned by the institution. With an individual's investments, however, a loss is borne by the one person concerned, and may be fatal to his whole accumulation. Safety is also secured by a surplus fund, built up out of earnings in mutual banks,

which guards against loss due to fluctuating values in securities owned.

A saving's bank deposit, therefore, insures one's principal against loss (assuming the bank to be honestly conducted), insures regular payment of interest, and adds interest immediately to the productive principal. Moreover, the saving's bank deposit requires no supervision or anxiety, a marked advantage, especially for the amateur to whom mortgages, stocks or bonds bring questions that require expert consideration.

United States savings system.—The Federal Government has instituted a national system of savings, the two parts of which are the Postal Savings and the United States Treasury Savings Certificates. Postal Savings receives deposits in amounts of ten cents or more. If desired, stamps to be affixed to an official card are given in exchange for each ten cents deposited, until one dollar is accumulated, which may then be exchanged for a Postal Saving Certificate, bearing 2 percent interest for each full year the money remains on deposit. Postal Savings Certificates are exchangeable in amounts of twenty dollars or more for Postal Savings Bonds, bearing 2½ percent interest, but as an outcome of the war financing one can exchange Postal Certificates for Treasury Savings Certificates in amounts of about $20, $80, and $800, each of which accumulates in five years' time to a value respectively, of $25, $100, and $1000, thus paying approximately a 4 percent compounded rate. If a holder desires to cash in his Certificate before maturity, a rate of about 3 percent is paid. These Certificates can be purchased through any post office, or directly from the United States Treasury Department, Washington, by mail. The liberal rate paid, and the superlative security offered by a government bond makes the Treasury Savings Certificates an attractive savings method or investment. The low rate on Postal Savings makes it desirable to transfer an accumulation in Postal Savings into the form of a Treasury Savings Certificate, or an ordinary savings

account. The postal savings bank law should be revised to pay a higher rate of interest, to pay interest for a part of a year (instead of for whole years only), and to take away the limit on deposits. As an institution it reaches the foreign-born and others not likely to patronize commercial banks. Its small unit of dime savings can wisely be used with children.

School banks.—In 1921-22, there was in effect in 4785 school buildings some method of encouraging thrift in school children by banking deposits, and 1,295,607 school children, of the 2,241,706 pupils in these schools, deposited $5,775,122, and the balance at the end of the year was $6,479,286. Interest of $125,452 was earned.[1] Sixty-seven cities report 75 percent of the children participating. In some instances, the plan is organized by the individual school building, and in other cases by the superintendent of schools for the whole community, and in one twelfth of the schools the deposits are made by the pupils directly at a bank. Such plans strongly supplement home instruction in thrift and merit cooperation by a system of allowances to children and plans for their earning money. Families with small surpluses might well be encouraged to make deposits at a school bank, one of the children acting as bookkeeper for the family. The pull of the weekly call for deposits would certainly stimulate care in expenditures.

The War Savings Stamp System of the United States Treasury greatly stimulated school savings during the war, and the extension work of savings banks is now an influence for developing school savings. Several companies are now promoting school savings as a business, establishing and supervising school banks. Several cities have provided a supervisor of school savings as an integral part of the school system. What can be done is evidenced by one city where 11,000 out of 13,000 children opened accounts within the first six months. Massachusetts, New York and certain other states have per-

[1] Compiled by Savings Bank Division, American Bankers Association. See, also, *School Savings Banking*, Ronald Press, 1923.

missive laws for school savings. A standard system should provide teaching of thrift principles with opportunity to save money at a regular time weekly. Instruction in personal accounts for children and household accounts and standards of spending should be a part of the program of teaching the simple principles of personal economics to all children. Penny-collecting without thrift instruction, or vice versa, is futile.

Building and loan associations.—Membership in a co-operative building and loan association is recognized as one of the best methods of borrowing funds for the construction or purchase of a house; it is, also, one of the best institutions for accumulating savings.

The New York law defines the object of "the cooperative savings and loan association" to be "to encourage industry, frugality, home-building and savings among its members; the accumulation of savings, the loaning of such accumulations to its members, and the repayment of savings when they have accumulated to a certain sum," or when desired. Such associations are known commonly as "building and mutual loan associations," since they operate largely in arranging loans for the construction and purchase of homes, but they are, also, called "savings associations," "cooperative loan associations" and "cooperative banks"; they are, perhaps, most accurately described by the New York legal title "cooperative saving and loan associations."

All cooperative associations operate in terms of shares of stock bought by members on weekly, or monthly installments. There are two chief forms of organization: first, the "serial" plan of issuing stock, whereby a new series of shares is dated every six months or year. For example if shares are dated Jan. 1 and July 1, a person entering March 15 must pay the back dues for January, February and March, at entrance, and then pay monthly dues thereafter. This puts all who take shares of a certain date in a common group as regards the allotting of dividends, and the maturity of their stock. The second form is the "perpetual or permanent plan" whereby

new shares of stock are issued at any time under date of a person's first payment of dues, which are then paid monthly thereafter. In dividend or interest computations the individual stands by himself. This is advantageous, obviating the real burden of back dues in starting. This plan has important flexibility in that members may pay as little or as much as they desire, month by month, quite as in a savings bank, and make withdrawals similarly. If one is also a borrower he must, of course, pay the minimum of interest due. "Terminating" associations were, also, an early common form, but are now rare. Under that plan, stock was issued only when the association was formed; persons coming in later must pay dues back to the beginning; when the shares matured, they were paid off and the organization terminated. National associations were at one time organized, but the genius of the organization works best in a local field where its members may supervise its operations, and the national associations proved undesirable, or unsuccessful. State laws now frequently limit an association's operations to the county in which its office is located.

The building association's mode of operation can best be understood by separately considering its two functions of (*a*) receiving savings or deposits, and (*b*) making loans or advances to members.

As a savings organization the building and loan association offers shares of capital stock to persons desiring to become members, each "share" so-called, having a paid-up, or par value of from $50 to $500, as may be provided in the constitution of the association. These shares are not paid for outright, as is capital stock ordinarily, but are paid for by weekly or monthly installments, or "dues." Thus, an association with shares worth $200 when fully paid in, may provide that "dues" shall be $1 a month until the par value is paid up. The accumulation to par value is, however, based not only upon the monthly dues, but upon the "dividends" declared upon the share every six months or year from the earnings of the

association funds loaned out at interest. The dividend on a share varies, of course, with the rate of interest earned on loans. By adding dividends to the dues of $12 a year, the $200 par value is reached in eleven or twelve years (for example, in one association, in eleven years and three months, i.e., after $135 has been paid in). If one is using the association for savings, one subscribes, therefore, for as many shares as one desires, each of a par value of $200 in the illustration cited, and pays on each $1 a month for about a dozen years. When they "mature," each share is worth $200 which sum can then be withdrawn by the owner. Withdrawals can also be made, if desired, at any time before maturity, in which case one receives back the dues paid in and the dividends declared up to that time.

As a method of savings, the association organized on the serial or "Philadelphia plan" requires, on the part of its members, the payment of a definite sum weekly or monthly. For example, if one subscribes for 5 shares, with a par value of $1000, there will be the regular demand for $5 a month, or $60 a year for the next dozen years. Such a method evidently does not accommodate itself to irregular income. Associations organized on the permanent, or "Ohio plan" have met this difficulty by permitting savings members to deposit sums larger or smaller than the uniform dues, as desired, and to make a deposit at any time, or to postpone payments without fines for tardy payment. Partial withdrawals may also be made as well as the complete withdrawal. Thus, while the saving is made in terms of a general plan of accumulations toward a definite par value, associations on the permanent plan give the depositors all the flexibility of a savings bank account as regards freedom of deposit and withdrawal, while keeping the advantages of a definite goal in accumulation, and the periodical demand for a small sum. If the association is one which accepts only the regular dues at stated periods, and penalizes delay in depositing with a small fine, a wise member will incur responsibility for only one or more shares on which

he can surely pay dues regularly. Then, as an extra surplus is available he can use it to prepay his dues and hasten the maturity of his shares, or he can deposit such occasional surpluses in a savings bank, thus combining the two institutions in his savings plan. All associations have the great advantage of furnishing a regularly recurring demand for savings. Once started, like life insurance, the person is under a compulsion to save, and human nature needs such a motive apparently. These associations have great possibilities as a saving method for persons with smaller incomes, and they are not sufficiently appreciated by this group. Persons with larger incomes can wisely use the associations as one of the institutions for savings.

Members who use the association primarily for savings, find its shares valuable as security for temporary loans which can usually be secured from the association up to the withdrawal value, by giving a personal note with the shares pledged as security. Shares are then still assigned dividends, which really reduce the rate of interest to be paid on the loan, and, an important point, the member has made a loan which he will endeavor to pay off, while if one draws out from a savings bank, he is under no mental compulsion to replace it. It is such motives which are most important in successful saving.

Withdrawals before maturity are sometimes credited at a lower rate than that upon shares which are carried to maturity, thus favoring the member who remains to the end. This short-time dividend rate of the association is evidently to be taken into account in deciding whether one will utilize the association for savings purposes. As a mutual bank the association does not agree in advance to pay a definite interest to borrowers. It pays dividends as earned; but associations operate under definite plans which produce a uniform dividend rate which it is safe to assume will be paid.

Some associations issue certificates of deposit bearing a fixed interest to persons not members who make deposits, but this practice is opposed as creating a preferred class of creditors. Some associations encourage savings by children

with a special juvenile share, thus the New York law provides that "juvenile savings shares of a matured value not exceeding $50 may be issued, to be held for the exclusive right and benefit of such minor"; "juvenile shares shall not be chargeable with fines or losses, or be required to make regular or specific payments; and they are entitled to dividends not exceeding four-fifths of the dividend on regular shares."

Are savings and loan associations safe as a savings institution? Like any financial institution, they are to be chosen with circumspection. In most states they are reasonably safe. Their organization and operations are generally directed by special laws, and they are often under the inspection of the state banking department. Their methods have been generally standardized along safe lines, although new experiments are still being tried and some associations may be questioned from this point of view. There can be no run on a building and loan association; withdrawals are guarded by rules. If an organization is closed out, each member will ultimately receive what he has put in. The security of the individual association will vary with its leadership, for while cooperative and democratic in form, and directed by officers elected by membership, such associations naturally tend to come under the management of a group of persons willing to carry the responsibility. A prime question, therefore, to ask locally is —who are the officers, especially the secretary (the salaried officer), the directors and the legal counsel. The fault sometimes found by borrowers from building loan associations that their rate of interest is high, is, of course, an advantage to the members who deposit without borrowing, for the high interest paid by borrowers is the basis of the high earnings on shares.

As a loaning organization, the building and loan association advances money to its member on proper security, usually on a first mortgage on real estate, especially under a contract whereby shares in the association of a par value equal to the loan are pledged to the association. When they mature,

the association receives their matured value, thus discharging the loan. In the meantime, the borrower pays not only the monthly "dues" on his shares, but also, of course, interest on the loan which is also collected monthly. A building association will loan as high as 65-75 percent, and sometimes 80-90 percent of the whole investment, provided the lot is owned clear, while a bank will not advance over 50 or 60 percent of the total. The explanation is that under the building association plan the borrower begins at once to reduce the loan, and at the end of the second year has already paid off more than 6 percent of it, thus rapidly reducing the risk to the lender and at the end of 10 or 12 years has paid it off in full. Moreover, the borrower is in most cases taking a loan for his own house, and the association's charges are not so much more than his rent would be, which makes an attractive risk to a lender. The annual payment on an association loan is about 12 percent of the loan, or $1 a month or $12 a year for each $100 borrowed, which provides both for interest and, as well, the retirement of the loan itself. Thus, $30 a month will carry a loan of $3000 and pay it off in about 12 years. The association is, therefore, not a cheap way to carry a mortgage indefinitely. Its method involves a relatively high interest charge, but since the association's earnings all go to members, and every borrower must be a member, the high rate of interest simply expedites the repayment of the loan. It is a method for paying off the mortgage, not carrying it.

To carry forward the illustration, suppose a person wishes to borrow from the association $3000 for the construction of a house the contract price of which is $3500, to go on a lot which is conservatively valued at $500 and which is owned clear by the would-be borrower. A loan equal to the value of 15 shares each of a par value $200 is necessary to secure the $3000. The person will apply for 15 shares and begin at once the payment of dues of $1 a month each, or $15 a month. He has now established his ownership to shares in

the association, which will have full value only after a dozen years, but which will at once serve as a medium for the loan. If the association approves the application for the loan (and the request for $3000 on a house and lot to be worth $4000 is usually within its loaning limits), then the sum is advanced, and is secured by the mortgage of the property and the transfer or pledge of the 15 shares to the association. The borrower agrees to continue the regular payment of monthly dues at the rate of $15 a month, and in addition, the interest on the loan of $3000 at 6 percent, which is $180 a year, this also to be paid $15 a month; so that a monthly payment of $30, of which $15 is for dues and $15 for interest, is undertaken. The interest carries the loan, and the "dues" gradually accumulate together with dividends declared, and after a dozen years the shares are "matured" at a value of $3000 and then extinguish the loan. There are other important facts regarding house construction by a loan from a building and loan association, but the fundamental fact is, that the borrower subscribes to shares equal in matured value to the amount of the desired loan, and pays for them in small periodical installments; and the interest is paid in similar small installments, and when the shares mature they extinguish the loan.

Sometimes, there are additional payments called the "premium" on the loan to be made, but many associations no longer make this charge. If made, it may be levied as an extra 10 cents per month perhaps on each share; or as a gross sum collected at the time of the loan which reduces the net proceeds of the loan; or it may be figured as an increased percent in the rate of interest. Originally, the premium was the method of allotting money for loan. Available money for loans was auctioned off to the borrower who would make the best bid, that is, pay the highest rate of interest. As associations have become established, the limit to loanable funds is not so much felt, since every borrower is a depositor and funds flow in about as they are needed, and any irregularities

in the supply and demand for money within the association can be regulated by borrowing from banks temporarily, when extra funds are needed, and depositing in banks, or buying securities when there is a temporary redundancy of funds. So, premiums are disappearing. Similarly, the system of initiation fees, fines for late payment of dues, and other special payments, is said to be disappearing, and financial arrangements are considerably simplified. There are certain preliminary expenses in securing a loan. The property to be mortgaged must be appraised by the association's appraisers to determine its value and its availability for a loan; the title must be examined or searched, and the mortgage and bond must be drawn by the association's attorney. These expenses are, of course, met but once.

An association "share" is a right to dues paid in and to a proportionate part of the surplus profits; it is not a claim to individual proprietorship in real estate belonging to the association. Dues may be paid in advance. In some associations the whole value of a share may be thus paid. If paid-up stock is left in the association, it is usually allowed only a fixed rate of interest, and all profits above that amount go to the association. Ordinarily, paid-up shares are to be withdrawn or cashed in, whereupon membership ceases. The amount of stock that an individual may hold is limited in many cases by the rules of the association. The depositing member of an association has become responsible for obedience to rules; he shares in net profits through his assigned dividends; and he is responsible for a share of losses, if they occur; he has a right to attend all meetings of the association, and a vote according to the law, or rules governing the matter; he has the right to withdraw his funds and his membership, that is, under the rules, he may surrender his shares and receive their cash value. Subject to rules, he has the privilege of securing loans and advances, and the money secured may be used in business or any way desired, so long as the loan does not exceed the present cash value of the shares. In case it does, other security must

be given and this must usually be a mortgage on real estate to be developed with the proceeds of the loan. In general, associations loan mostly on real estate. The borrower has the right to discharge his loan by paying back the amount plus all claims of interest against it, without waiting for his shares to mature.

The association is really a cooperative bank owned by its members to whom go all profits after paying expenses. It makes the person with small income his own capitalist. He secures the benefit of earnings in advance, and pays off the advance by periodical payments as earnings are received. The rate of return exceeds anything available to persons of small means who can only lay aside a small periodical surplus. One great advantage of the association is its installment method, whether in savings, in paying interest, or reducing a loan; the whole charge to the member is assessed as a uniform weekly or monthly payment. Since the association is mutual, it is able to make allowances for delay to a member who suffers misfortune. While foreclosure is ultimately as certain with an association as with a mortgage company or bank, if payments on the mortgage are not made, temporary accommodation can be had through an association which may not be possible elsewhere.

After carrying the original loan for a few years, the house owner may find it necessary to reduce, if possible, his monthly payments. If the shares, in the illustration cited, have accumulated to one-half their value, say $1500 of their $3000 par value, he may retire his shares and have the $1500 applied on the $3000 mortgage, substituting a new mortgage of $1500 and starting a new series of shares with a par value of $1500 on which he would henceforth pay only $15 a month, instead of $30—but his payments to continue for a dozen years from this time instead of for the few years required to finish the payments on the $30 basis. This method would extend the time during which payments must be made, but reduce the burden by half in the second period. The association rules

may make such a transfer financially disadvantageous by crediting dividends at a lower rate in early years, and at a higher rate later on, so that the person who carries his original shares straight through to maturity secures a higher dividend rate. Were such the case, however, personal circumstances, such as a break in earning power, might still make the suggested transfer desirable. Again, a person who has started on an association loan, the plan of which is to pay off the mortgage, may, after a few years, find it necessary simply to carry the mortgage, and give up for a time, at least, the effort to pay it off. He can then arrange to withdraw his shares from the association, or rather, have their accumulated value applied in part payment of the association's mortgage, and can secure a straight mortgage from a savings bank, or mortgage company, at the lowest rate of interest he can secure, to pay the balance due on the association mortgage. Thus, in the illustration cited, he can apply the $1500 present value of the association shares on its $3000 mortgage and secure the other $1500 necessary on a mortgage, from a savings bank perhaps, at 6 per cent. He now retires from the association and all obligation to it, but he has assumed a new obligation, the payment of $90 interest a year to the savings bank, and the payment of $1500 principal at some definite time; meanwhile, he pays nothing toward the reduction of the principal. Evidently, it is a lighter burden to carry, but no provision has been made for getting rid of it. Persons who have little available capital sometimes use an association loan first, since it may cover three-fourths of the investment; and when the shares have a matured value sufficient to reduce the loan to a 50 percent basis, they substitute an ordinary mortgage which requires only regular payment of interest. The latter method is tempting and sometimes really advantageous; but small periodical payments which not only pay interest, but shortly discharge the mortgage are usually preferable. Many families who are paying annual interest on a straight mortgage would find it advantageous to change to a building association, or some similar plan in which periodi-

cal payments of interest and also on principal are required. A person who finds it possible to pay a considerable sum occasionally, in addition to his regular charges to the association, can have this applied either directly in reducing the amount of the mortgage, or in prepaying his dues to the association, interest being allowed upon such prepayment, thus hastening the maturity of the shares. Since the organization is mutual, the member will find the executive officer ready to advise as to the most advantageous method of applying payments, or shifting the loan, should occasion arise.

Building associations require that fire insurance be carried on buildings on which loans are made. Health, accident and disability insurance which would provide an income to keep up payments on shares, in case earning is interrupted has been urged. While it could not be required, it certainly would be desirable. Life insurance sufficient to pay the unaccumulated part of the loan is especially desirable. Belgian associations have secured a "reducing term" policy of life insurance under which the amount of the insurance is reduced each year as the amount required for a discharge of the mortgage is reduced by the monthly payments of dues, and such life insurance is a required part of the loaning contract. Any insurance, save fire insurance, it is obvious, is for the benefit of the borrower, not of the association, and the borrower will consult his own interest in insuring, if he can.

The associations in some of their leagues have proposed that state laws should be secured exempting homesteads from taxation up to $3000. While this is of doubtful expediency, Congress has recognized the fact that the small house owner merits special consideration by giving exemption to building and loan associations from the corporation tax of 1909, and there is also special legislation in several states, as in New York, where it is provided that shares in such an association shall be exempt from execution to the amount of $600, and that the association is not taxable under any law which exempts savings banks, nor may it be taxed as a corporation, unless the

law specifically so prescribes. On the contrary, in some states, notably Michigan and Kentucky, the corporation tax laws have hampered building associations.

The extent of the building and loan movement is indicated by the fact that there were in the United States in 1919, 7788 such organizations. The first one was established in Philadelphia in 1831. In 1893, the United States Commissioner of Labor reported 5838. In 1919, when there were 1950 more, Pennsylvania had 2339, New Jersey 841, Ohio 692, Illinois 670, Indiana 355, and New York 254, and there were such associations in most, if not all, of the states. These associations had then 4,289,326 members, an increase in five years of 1,185,391. The assets in 1919 were two and one-eighth billion dollars. Several associations have a membership of 20,000; one person in twenty-five and probably one family in six belong. One-half the dwellings in Philadelphia, it is said, have been constructed or bought through building loan associations.

Credit unions.—A new type of cooperative bank, the credit union, has been introduced recently in Massachusetts, New York and North Carolina, and possibly other states, in which depositors are members much as in the building loan association, and buy shares of stock with their deposits, but also may make other deposits and secure loans. An organization is usually formed by the employees of some establishment, or a group of neighbors in a rural district, or a racial group in town, who, knowing each other, are able to pass intelligently on applications for the loans which come before a committee of the membership. The Credit Union brings banking facilities to persons of small means who otherwise lack them entirely. The group can not only accommodate its members by a deposit and loaning service, but the group's deposit at a commercial bank will establish its credit there, so that a loan may be made to the Union on the group liability. The Credit Union's loans are not like those of the building loan for house purchase; but may be for any approved purpose, as business, house furnishing, or any family emergency, provided the loan is approved

by a committee of members, and provided the note is formally endorsed by other members in addition to the drawer of the note. As a people's bank, the Credit Union should be widely extended; or, if America is not to adopt this cooperative bank, persons of wealth should endow people's banks as commercial institutions to serve people of small means with all banking services.

ADDITIONAL REFERENCES

BLAKEY, ROY L. "The New American Thrift." *Annals of American Academy of Social and Political Science.* January, 1920.

BERGENGREN, R. F. *Co-operative Banking. A Credit Union Book.* Macmillan, 1923.

CHAPTER V

INVESTMENTS AND LIFE INSURANCE

In the preceding chapter the process of household saving or accumulation out of present income has been discussed, and savings banks, government savings, school banks, building loan associations, and credit unions have been described. The present chapter discusses the transfer of savings into investments and into life insurance, the most common American form of thrift.

Investments.—Investment is the placing of money more or less permanently in some form of property in order to secure an income. It assumes that the principal will be safe and later recoverable, when desired, and that in the meantime interest payments, or dividends, or rentals will be received, more or less regularly. Investment is distinguished from speculation, in that in the latter the money is laid out in a purchase in the expectation of making profits from a later sale at an increased value. The thing purchased in a speculation will, it is expected, fluctuate in value—and it is anticipated that the fluctuation will be upward so that one can sell out at a quick profit. What fluctuates, however, may go downward, as well as upward, and in that event, one may have to sell at a loss. The expert speculator is successful because his knowledge enables him to make gains more frequently than losses, while the amateur generally tends to lose. The first and last word for the average person who tries to save is to invest his money, not speculate with it, and to choose only safe types of investments.

Investments may be either (*a*) of the creditor or interest-paying type in the form of a loan, such as a note, a real estate mortgage, a bond, or loan to a government unit, or to a cor-

poration; or (*b*) investment may be of the ownership type, in the form of complete ownership, as of real estate, or a business, or part ownership in the form of shares of stock in a corporation. For the beginner, creditor investments which do not involve risks of ownership are generally preferable.

Investment criteria.—There are certain criteria by which investments are to be judged:—

Safety of principal, or degree of certainty that one can recover the amount placed in the investment is of fundamental importance. Fluctuation of principal is a related quality—that is, the increase, or decrease in value of certain investments. If fluctuation is present to a marked degree, this constitutes a speculative quality. "Stability of market price" indicates absence of fluctuation. "Appreciation of value" means increase in value; a quality erroneously ascribed, for example, to all city land values since the facts show that, while such values usually appreciate in growing communities, they are often depreciating in certain sections of such communities through change in economic use.

Legality concerns the validity in law, particularly of bond issues; meaning, for example, that all forms of law were duly followed, and in a municipal issue, that the bonds come within the legal bonding limit of the community. Legality is one of the criteria of safety.

Safety of income relates to certainty and regularity of payment of income. Interest on a corporation bond is paid regularly at the peril of financial disaster to the corporation issuing it; but dividends on common or preferred stock can be "passed," that is, not paid, in any year by a vote of the corporation's directors. If the stock is "cumulative preferred," the payment can only be postponed by such a vote, and must be paid ultimately, if any earnings are ever paid. Safety of principal and of income usually go together.

Income on some investments is uniform, on some fluctuates. Bonds pay a definite interest rate; preferred stock similarly, if it pays anything; common stock pays the dividend rate voted

each time by the directors—it may be low, it may be high, it may be nothing at all. To one dependent on investment income for his living, entire reliance on stock investments might be suicidal.

Rate of income is a separate consideration. Government bonds pay a low rate, municipal and state bonds pay almost as low a rate, the primary reason being the almost perfect security of such bonds, often with tax exemption privilege, hence the demand for them. Railroads of long established earnings may borrow on bonds for rates only a little higher than governments enjoy, while public service companies have had to pay a slightly higher rate, and industrial companies because of the greater uncertainty of their financial success and the greater risk of loss to the investors, have to pay a still higher bond interest rate, varying, of course, with the character of the company. Countries, or sections where conditions are unsettled, and precarious industrial enterprises will pay greatly enhanced interest rates. Rate of interest on bonds, therefore, tends to be low in proportion to the security of the investment. To be content with 6 percent and safety is an old rule—though in unusual conditions the safe rate may be higher, as on farm mortgages in newer sections; and sometimes, the safe rate may be lower than 6 percent.

Marketability indicates the ease of conversion of the investment back into money. Bonds and stocks listed on central stock exchanges, such as the New York Stock Exchange, can usually be sold by telegraph order. Real estate, or a real estate mortgage, although worth 100 cents on the dollar, may be only marketable by diligently seeking a purchaser for an investment of that type and amount. For investments to be left undisturbed a long time, marketability is of small or no importance; for a reserve that may be needed in emergencies, it is a prime consideration. To the average person marketability is very important, but like any other desired quality, must be paid for by accepting a slightly lower interest rate than on investments of low marketability.

Collateral quality indicates availability as a pledge to guarantee the repayment of a bank loan, and runs parallel to marketability. Stability of value is also important in collateral, else a decrease in its value may require an increase in the amount of collateral deposited.

Tax exemption indicates that the investment, or the income upon it, is not liable for certain taxes. Thus, the United States Victory 3¾ Notes were not liable for any taxation. Tax-exempt securities have become of great importance with the laying of income taxes, as their ownership circumvents the collection of taxes on income derived from them.

Duration, or maturity, indicates length of time the investment is to run until paid. Bonds are for a certain term, as 5 years, 20 years, etc., at the end of which they mature and are paid; or the company may refund them into a new issue, or otherwise continue the loan, although the individual investor can, of course, demand his money. "Callable" bonds are those that may be matured on the motion of the borrowing corporation on certain conditions, for example, "callable at 110 after 5 years." A real estate mortgage is for a definite term of years, although the lender may allow it to run on after it is due. Stock, or other ownership has no maturity; one recovers one's investment by sale only, not by maturity, as of a bond.

Denomination indicates the face value of the security, as a $100, $500, $1000 bond; a $1, $10, $100 par value of stock.

Diversification of investments is the practice of dividing one's funds into different kinds of investments; for example, municipal, railroad, and public service bonds; and the part put in railroad bonds, for example, to be put in issues of different roads.

Degree of oversight required indicates the amount of personal attention which an investment involves. With a government bond this may be very little; but evidently, it is more in a coupon bond which requires a place of safe deposit for security and a periodical visit to the place in order to clip the coupon, than it is in a registered bond which is safer from

loss (but involves more difficulty in its transfer), and on which interest is paid by a check sent through the mails. A real estate mortgage requires critical examination in its purchase and continued oversight to be sure that taxes are paid, fire insurance is maintained, and interest is received when due.

The social service of an investment concerns the ultimate economic and social results to which one contributes by placing one's money in it. Money put into a 6 percent housing company is worth more socially than that put into a luxury industry, or into a cut-throat loan-shark or working men's loan enterprise that is taking unconscionable interest.

Not all these criteria of investments are equally worthy of attention by the average investor. Safety of principal and of interest are fundamental; hence, the preference for bonds, instead of stock. Ready marketability for part, at least, of one's reserve, so that it may be used as bank collateral, is likewise essential. Degree of oversight required may be a practical consideration of considerable importance.

Types of investments.—Ownership of one's home is the usual first investment. Investment in one's own business, as a farm, or some other enterprise, as a store, or factory, is the next most common. In 1910, 61 percent of the 6,351,000 farms in the United States were occupied by owners, and 52.4 percent of the 268,491 manufacturing establishments enterprises were owned by individuals, and 20.2 percent more by partnerships. Stock ownership multiplies ownership of corporation property into hundreds of thousands of individuals.

Purchase of other real estate to rent for income is often an early step in investment; but to handle it successfully is more difficult than the amateur anticipates. It involves losses by unoccupancy, unexpected costs in increased taxes, and in repairs, and by the obscure factors of depreciation in the building's value and of possible decrease in land values; one may be losing money without knowing it. It will be unusual conditions that give the amateur a net 6 percent in handling real estate in normal times.

Lending on mortgages is to be recommended rather than real estate ownership. It involves careful selection and oversight as to the risk, but it yields in most communities a safe 6 percent return. The oversight factor can be eliminated by buying through investment houses which make investigation, collect interest and forward it, in which case the investor will usually get a slightly lower rate. There are, in the largest cities, companies handling mortgages which guarantee the payment of interest and of the principal, as they become due, and which charge usually one-half of 1 percent, or thereabouts, so that their mortgages net 5 or 5½ percent. There is to be distinguished in security the situation in which the investor takes physical possession of the original mortgage with its accompanying contract of guarantee from the mortgage company, and the situation in which one has only a contract for a loan made to the mortgage company, which latter holds the security. With companies of long established reputation the distinction may not be important.

Bonds and other securities of the government, the states and cities and selected railroad bonds are ranked as "gilt-edged securities." Certain of these meeting the legal standards in the state concerned are often described as "legal investments for savings banks in Massachustts," or New York, etc., or as "legal for trust funds in the State of ———."

Bonds of public service companies and general industrial companies are given a slightly less favorable rating. In general, a "bond" is understood to be on the same footing as a real estate mortgage. It is evidence of a loan the repayment of which is guaranteed by a pledge of real property, with foreclosure possible as a way of enforcing repayment. With a bond, one does not have exclusive rights as with a mortgage which one person alone owns; hence, ultimate court action, if ever necessary, is secured by committees that represent bond holders. The word "bond" is sometimes loosely used. Therefore, while the average investor may well restrict his investment to bonds, he should choose his bonds only on trust-

worthy advice; for "a good stock may be better than a poor bond." All bonds tend to vary somewhat in price with conditions in the money market, as well as with conditions in the particular enterprise.

Shares of stock are a part ownership in a corporation, carrying a vote at stockholders' annual meetings, but no actual power, unless one owns a majority of the stock. Stock tends to fluctuate more in value than do bonds; for its dividend earnings fluctuate and may become nil. Stock in America is typically a speculation, and it should be left, as a rule, to the wealthy who can afford to lose money, and to the expert in the particular industry.

Stocks of mining, oil, the development of new inventions and similar uncertain enterprises, are especially to be avoided by the average investor. Fraudulent promotions are usually in stock, rather than bonds; but occur in both fields.

Putting money into a business, if one is devoting one's full time to it, is one of the best types of investment. But putting money into a friend's business is a very common source of loss. It is not judicious to start an enterprise as a side line, putting money in it, when one must entrust the leadership to another. For example, thousands of town people lose money every year attempting to farm land by hired labor directed from a distance. The mortgage on the farm, the bond of the enterprise, is a safer investment for the outsider. But the word "bond" carries no magic protection; one must always know the physical properties that make the bond good.

Investment bankers.—In addition to the savings institutions already described, there are investment banks, bond houses, and related enterprises which deal especially in bonds. Large issues of desirable bonds are generally handled by some one or more of the dozen or so great investment houses of New York, Chicago, Philadelphia, Boston, with which a much larger number of important investment firms are in working relations, and these in turn are in contact with smaller firms and individual investment agents.

The larger central investment houses investigate proposed issues of bonds through their own legal, engineering, and financial experts before buying. Having accepted an issue, it is sold much as other merchandise with a percentage for handling at each stage. The circulars and announcements of the central investment houses are a valuable source of information.

Some investment houses specialize—for example, in local mortgages in cities; in farm mortgages in a certain state, or section; in real estate mortgage bonds, that is, securities based on real estate mortgages. For the average person, his own banker will be the first contact with the investment market and his banker's advice should be sought, and can usually best be followed. He can buy a security of his local bank on installments, borrowing funds for the purchase from the bank, pledging the bond itself as collateral for the loan, and paying for it in installments. Fraudulent "investments," worthless bonds and stocks, are being promoted by aggressive salesmanship. It is a safe rule never to buy an investment which your banker will not strongly recommend and which he would not accept as collateral on a loan. If one is buying one or more bonds a year, it is wise to establish relations with an investment house of outstanding excellence and receive their circulars of information regularly.

Life Insurance

Life insurance is a contract between an individual, called the insured, and an insurance company, whereby the insured makes a money payment, each year, to the insurance company, in return for which the company agrees to pay a certain amount at the death of the insured to a third party named in the contract and known as the beneficiary. Life insurance is a business provision designed so that a man shall in his life time make as adequate financial protection as he can for his family after his death. The contract is called the policy. There are various types of policies and new features of policies are being developed. The periodical payment is called the

premium, and is usually payable annually, though semi-annual or quarterly payments can be arranged; and weekly payments are made on the "industrial insurance" commonly carried by members of workingmen's families. Life insurance might be called the American method of thrift.

Policy forms vary in different states, but some generally valid statements may be made. The contract is not binding until accepted by the company and after the payment of the first premium. Certain "standard provisions" are legally required in many states: dividends or a form of rebate or profit earned on earlier premiums paid in must be declared annually, or in some states, at least quinquennially; loans must be granted by the company on the policy up to its loan value; a month's grace in the payment of premiums is to be permitted; the policy must contain tables showing loan values, "the non-forfeiture value" or the amount of insurance continued in case payment of premiums is stopped at any time, and the conditions for reinstatement of the policy, if it has been allowed to lapse; the policy is to be paid within 60 days after proof of the death; the options of settlement are to be stated, as payments in cash or installments, etc.; if premiums are not paid, the insurance is not forfeited, but the insured will receive the surrender, or non-forfeiture value either (*a*) in cash, or (*b*) in paid-up extension of the whole policy for a limited term, or (*c*) its equivalent in a fully paid-up policy for a sum less than the face of the policy, i.e., in insurance for a reduced amount for the rest of one's life; finally, the policy must be incontestable after two years for all causes except the non-payment of premiums, i.e., the company binds itself not to contest in court after this time any claims arising under the policy. No policy may be issued insuring a person at a younger age than the actual age when application for insurance was made, thus prohibiting dating back of insurance. Failure to repay a loan or interest on a loan will not forfeit a policy, so long as the indebtedness is less than the loan value; no settlement at maturity of less than the face of the policy plus dividends and less any indebted-

ness is permitted. Finally, the actual form of the policy must be one approved by the state insurance department.

Types of policies.—Policies may be classified according to manner of payment and of maturity as of four types, whole life, limited payment life, term, and endowment policies.

1. Whole life, or ordinary life policies require premiums ordinarily payable throughout the life of the insured, and mature only upon the death of the insured. For example, a person 21 years of age may pay $18 a year for $1000 of insurance as long as he lives, and upon his death the proceeds of the policy are payable to his estate, or some specially designated beneficiary.

The whole life policy is the cheapest insurance for life-long protection. The person starting permanent insurance in middle life will usually choose this policy. The one drawback is the continuous payment of premiums to the time of death which may be years beyond the end of the earning period. But with many ordinary life policies the dividends may be left with the company to make the policy a paid-up one, or even to mature its face value as an endowment, perhaps at 60 or 65 years of age, and this provision removes the objection of the old age burden. The ordinary life policy combines saving to a reasonable extent along with one's insurance. It has a constantly growing cash value that after two or three years can be borrowed against, or if one's circumstances make insurance no longer desirable, this cash value can be secured by terminating the policy. Also, this cash value in case of disability toward the end of life would "extend" insurance of the amount of the face of the policy for a definite period without paying current premiums, or it would secure paid-up insurance of a lesser amount good for the rest of one's life. If one's circumstances change, so that its protective aspect is not so important, this type of policy has enough of saving to make it worth while continuing on that score, so as to leave its proceeds as a legacy.

2. Limited payment life policies, the proceeds of which are payable at death as in the whole life policy, require only a

limited number of payments of premiums, as for 10, 15, 20 or 30 years as may be agreed upon (hence called "limited payment" policy). Thus a person of 21 years may pay $28 a year for 20 years, or $34 a year for 15 years, or $46 for 10 years, or $83 for 5 years, or $377 in a single payment, for an insurance of $1000 payable at death. If the person dies before the end of the series of payments, the policy is thereby matured and paid. The premium on a limited payment policy is larger than on a corresponding life policy, since the number of premiums paid on the latter will be much more numerous in the average case; similarly, the amount of the individual premium increases as the number of payments decreases. Comparing the limited payment policy with the whole life policy, its advantages are: a smaller total sum of money actually paid in over the whole term, and since the payments are larger, and are compressed within a relatively few years, there is a larger cash surrender and loan value on the policy within that limited period, i.e., the policy emphasizes saving and restriction of premium payments to a short term of years, the most productive years of life, and avoids the burden of paying premiums in old-age when earning power has ceased.

3. Term policies provide temporary insurance during a term of years, for example, five or ten years, during which premiums are paid, and mature only if death occurs during this period. They terminate at the end of their period. Such policies may be renewable either with or without a medical examination, as specified, at the close of the period. Usually, they may also be converted at the will of the insured into one of the three other types of policies—whole life, limited payment, or endowment. Term insurance may be written for an amount which decreases year by year, a desirable type to cover a mortgage decreasing year by year, or other decreasing liability. A man of 21 may secure "term insurance" for 5, 10, or 20 years at a cost of from $11.50 to $12 a year; a person of 41 years would pay for similar policies $16, $17, and $20 per year for the term specified. Term insurance is a wise temporary supple-

ment to other insurance as when a father wishes to carry an extra amount during the minority of children, or wishes to hedge against special liabilities undertaken, such as a house being bought by partial payments, so that on the unforeseen death of the purchaser the insurance will complete the purchase. The term insurance policy has been used in this way occasionally by real estate companies in America, and is a required feature of building association loans in Europe. A young couple with small means may well start with a term policy, if necessary, as a given amount will purchase much more temporary insurance of this form; then, after a few years, as income increases, it can be changed to a more permanent form; or such a couple may take some of both forms. Business men use the term policy for temporary protection; the family more commonly should do so.

Term insurance has disadvantages also: there is no cash surrender, or loan value, and no cash value at maturity, although dividends may create a small cash value. The policy expires shortly and one may be without insurance, unless it can be renewed without medical examination. At any rate, the premium increases each time it is renewed, and there is usually an age limit of 55 or 60 years beyond which renewal is not permitted. So, if exclusively depended upon, one may find it impossible to renew the policy. Term insurance is pure insurance with no element of compulsory saving in it. As a permanent exclusive type, it is undesirable; as a supplementary policy and the cheapest insurance for a limited period, it is invaluable.

4. Endowment policies, like the limited payment life policy, require the payment of a limited number of premiums. They are payable as insurance upon the death of the person insured, but unlike all other policies, mature at the end of the specified number of payments, and are payable to the insured, if living, as an "endowment." A "pure endowment" policy is sometimes written payable only in case of survival to the end of a term of years; in case of death nothing is paid. The ordinary endowment policy combines the pure endowment with term insur-

ance. Like term insurances it matures in case of death within the period specified, and like a pure endowment, it is payable to the insured, if surviving at the end of the payments. The term of payments may be the same as the term of the endowment, or less, e.g., a person may secure a 20 year endowment, that is, one maturing in 20 years, and pay for it either in 20 annual payments, or, if desired, in 15, 10 or 5 larger annual payments. Endowments are written for terms which are multiples of five years, as desired; for example, a 10-payment 30-year endowment, a 5-payment 15-year endowment. A 20-payment 20-year endowment for a person 21 years old will cost $47 per year for 20 years, or will cost $58 per year for 15 years, or $79 a year for 10 years, or $143 a year for 5 years. Whatever be the number of payments, the policy is matured by the death of the insured, or is paid to him, if living, at the end of the 20 years. The endowment is essentially a method of accumulating a fund, the accumulation being safeguarded by an insurance contract, so that in the event of the person not living to complete the accumulation, the proceeds of the insurance will provide the fund. The endowment insurance policy from the point of view of the company, combines what might be called a savings-bank accumulation, supplemented by term insurance with a decreasing principal, so computed as to be always sufficient in case of the death of the insured to supplement the accumulated fund, and make it equal to the face of the policy. Endowment insurance meets the need of accumulating a definite fund for any specific purpose at a definite future date, with a guarantee that death will not interfere. It provides a means of saving for a child's education, for paying off a mortgage that is not already subject to amortization payments, for providing an old-age fund. Special forms of children's endowment policies have been put on the market: the simplest guarantees the payment of a definite sum at a definite age; some provide for the return of premiums in case of the child's earlier death; some are pure endowments providing no return in case of death, the only benefit being the en-

dowment on survival to the end of the term. Some children's policies provide that in the event of the death of the purchaser the policy becomes fully paid up, and the endowment is paid to the child at the end of the term.

The joint life policy is an insurance upon two or more lives which is payable upon the first death only in the group. It may be taken out by a husband and wife, and is then payable upon the death of either. One thousand dollar insurance on two persons will cost approximately as much as $500 each on the two lives separately. Under a joint policy, if either die, the insurance is terminated, and if the survivor desires further insurance, he may find himself uninsurable, although perhaps he should take out more insurance if there are children still to be protected. Under separate policies, death of one terminates one policy only, and the other continues. Still there may be conditions, as of a childless couple, in which a joint policy would be desirable.

The disability clause.—A "disability clause" has been added to policies by over half the American companies doing four-fifths of the business. Its general purpose is, in return for a small annual fee, usually of 25 or 50 cents per $1000 of insurance, to guarantee to relieve the insured from the burden of paying further premiums in case of total and permanent disability, i.e., inability to make a livelihood. That this risk is a real one is indicated by the fact that of persons 20 years of age, one in twenty-five will become so disabled, of persons of 40 about one in seven, and of persons of 50 years, about one in four will be so disabled. There is no uniformity as to this policy provision when present, but the desirable provisions are as follows: disability should be defined as inability to follow one's regular profession, rather than as commonly, inability to follow any occupation; benefits should be for disability due to any cause whatsoever not fraudulent, and not to limited causes as in some policies; the benefit given should permit as the insured may choose either a waiver of further premium payments during the period of disability or the immediate payment

of the policy, as though matured by death. As, on the average, the permanently disabled person lives only about one year and five months, the financial burden of the disability clause is not large for the company; at any rate, the insured pays for it in the premium charged.

Disability clauses should be available on all types of policies; should be available so long as premiums are being paid, and not be stopped at 60 years of age as in many policies; the settlement of the policy, if matured by disability, should be the financial equivalent of the face of the policy; after disability the policy should continue to receive its share of dividends, i.e., maturity for disability should not stop dividend payments.

Insurance companies.—The buying of insurance is, in part, the selection of a company with which to take out a policy, but choice here is less important than it was at an earlier period, when the insurance business was less developed, and less certain in its financial basis and not yet brought under state supervision to insure only safe methods of operation—in a word when companies varied widely in their plans and security. There is one fundamental choice, however, still to be made, "old line" companies versus assessment organizations. The former, in general, are to be recommended, and the latter only considered as they operate on old line plans. Old line insurance is that in which the company collects a uniform premium sufficient in amount to accumulate a reserve in the earlier years of payment which, having increased at compound interest, is available in the later years of payment to carry the high costs of insurance when death rates have increased.

It is obvious that costs to the company in death claims are less with a group of young persons than with the same group when older, for deaths are more frequent at the later period; so an individual member of an insured group would naturally pay less for the first years of his insurance, and more in later years. A "natural premium" just equaling annual costs might therefore be charged for insurance, but it would increase from a small sum in the first years to an unbearable sum in later

years. Old line insurance meets the difficulty by collecting a uniform premium set large enough to leave a surplus after meeting the small costs of insuring the group in its early years and investing this surplus to accumulate and pay a share of the heavy costs of later years. Accordingly, old line insurance accumulates a reserve, or sinking fund on each policy, and makes the cost to the insured a uniform cost through the years.

The assessment system theoretically is financed by collecting, each year, from each surviving member of an insured group, a premium varying with the cost of that year's insurance. A level premium is not guaranteed and a reserve is not accumulated. There have been various ways in which the assessment plan has been carried out, and two kinds of assessments organization, the assessment company, or a stock company writing insurance on various modifications of the plan, and "fraternal" assessment insurance operated by various societies and lodges. Such insurance has fallen under legal ban in certain states, and is generally disapproved by those having to do with old line companies. The fraternal societies are, therefore, transferring from pure assessment plans to old line methods in which reserve funds are a feature. Particular caution should, therefore, be had if one considers insurance other than that of an old line company, and assessment systems operated without reserve funds may well be avoided. As to choosing between the companies which write standard policies, there is little definite advice which can be given, except that a company of long and conservative standing, rather than a new one, will probably be preferred. The available companies which write standard policies are of three types: stock companies in which the owners of capital stock receive all net profits; mutual companies in which there are no stockholders, but ownership and the selection of officers is vested in all who carry insurance in the company, and to them go all earnings as dividends upon their participating policies (see below); mixed companies, or those with capital stock which issue participating policies on which

dividends are to be declared after which net earnings are declared on the capital stock. Pure stock companies of a profit-seeking type have in many cases transferred to the mutual or mixed type.

Participating and non-participating policies.—One fundamental difference with regard to the policy is whether the contract provides that the holder participate in the earnings of the insuring company. If the policy is a "participating" one, dividends are declared upon it which may be taken in cash, that is, used "to reduce the premium paid"; or, they may be left with the company, that is, used to buy additional insurance, to shorten the term of the endowment, to shorten the premium-paying period, or to accumulate interest with the company for the policy holder. In a non-participating policy the premiums paid are without dividend or refund. They are accordingly lower than those on a participating policy, on which dividends are to be declared. Participating policies are usually preferred, unless it is essential to secure the lowest rate immediately. The participating policy may be said to be on a safer basis in that the dividend may be adjusted to varying interest conditions, unusual mortality rates, and a larger or smaller proportion of expense in doing business. If the company does better than it anticipated the insured gets the benefit in a larger dividend, if hard conditions are met, the dividend permits an adjustment without threatening the stability of the company. Dividends may be declared annually, quinquennially, or at longer periods; but policies with long-deferred dividend periods should be avoided, and are illegal in some states. Dividends declared annually should be preferred, and also freedom as to ways in which the dividends can be applied. In general, it is wiser to apply them so that they will shorten the long-run burden of the insurance, e.g., hasten its maturity, rather than reduce its present cost as they do when accepted as cash or its equivalent in reducing the present dividend payment.

A non-participating premium is an unvarying sum; a par-

ticipating premium is a maximum sum, not to be exceeded, but subject to a varying reduction.

Loans on policies.—Money can be borrowed from insurance companies on most policies, usually after they have been in effect two or three years; the basis of the loan is the reserve accumulated from the excess of premiums paid in over the cost of insurance to the company to date; that is, the loan is not secured by the fact that the policy will mature some day at the death of the insured, but rather by the fact that the company has in hand a cash reserve paid in by the insured to which as a "cash surrender value" the insured has, at the time, a legal claim if he wishes to terminate his insurance and surrender his policy. A promissory note is given for the loan, and interest paid annually at the time the premium is paid. Loans are sometimes made to meet premiums due; but more often to secure funds for business purposes. Such loans will often stand for years unpaid, perhaps until the policy matures at death, when the loan may use up a good part of the amount due. The custom of such loans should be gravely questioned. When a man takes out insurance and names his wife as beneficiary to protect her and their children, it is an unjust diversion of funds to convert accumulations for family protection to business uses. Policies are of course often carried primarily to protect business interests.

Beneficiary's rights.—The person taking insurance on his life may make the policy payable to his estate, or to some person designated in the policy, and called the beneficiary. The insured may name a beneficiary, and either reserve, or not reserve the right to change the beneficiary. If the right to change is not reserved, the policy creates a vested right for the beneficiary, and the consent of this beneficiary must be secured for any change to another beneficiary. If the insured has reserved the right to make such a change, he can do so without the necessity of the first-named beneficiary consenting. If an insured has reserved the right to change the beneficiary at will, the cost value of the policy, according to the national bank-

ruptcy act, can be taken in bankruptcy proceedings by the man's creditors. In a policy taken out by a man to protect his wife and children, it seems wisest to name the wife as beneficiary, without reserving the right to change. If changed conditions make it necessary to change the beneficiary, the wife can give her consent, but the policy cannot be endangered by business difficulties. If the wife dies before the husband, the title to the policy reverts to the husband as the person insured. When a policy has matured by death of the insured, the sum due the beneficiary cannot be attached for the debts of the estate.

Payments to beneficiary.—Policies vary, also, as to the character of the settlement to be made on maturity: as a single payment in one sum, or payments in installments (the number specified, or to be chosen), or as a life annuity with, or without, a minimum number of payments guaranteed, or it may be given the form of an interest-bearing bond, paying interest at a certain rate for a term of years. Choice in advance as to the method of settlement may be important, as in the case of a designated annuity for the rest of her life which is often provided for a surviving wife, rather than the payment of a gross sum which may easily be lost by a poor investment. Of course, a policy has a definite cash value at maturity, and a beneficiary who understands the possibility can herself purchase an installment bond, or annuity, as desired, yet advance plans are more certain.

Under these options as to settlement, a policy may be settled by an "installment" contract providing that it be paid in ten equal payments, or twenty equal payments, or some other number, as may be desired. The installments paid will always total more than the face of the policy, since the part as yet unpaid is accumulating interest which must go to the beneficiary; thus, a $1000 policy may be paid in ten annual installments of about $116 each. Such annual payments for a definite limited period are good as long as they last, but they may leave the beneficiary without income at a time when he or she is unable to earn.

Annuities.—Life insurance may be paid in the form of an "annuity," or an annuity may be bought outright. An annuity might be called life insurance moving backwards; it is a contract under which one pays down a principal sum, corresponding perhaps to the face of a policy, and receives in return an annual payment, either for a definite term of years, or for one's lifetime, corresponding to the annual payment of premium. The stipulated sum is called the annuity, and person receiving it the annuitant. The annuity may, if desired, be paid semi-annually, quarterly, or monthly.

The annuity is an insurance contract that should be widely known and used. It is the best method of utilizing a retirement fund when there are no survivorship interests, as those of children, or other heirs for which one wishes to provide after death. The annuity continues until death, when by the theory of its value the principal sum and all interest accumulated upon it will have been paid out in the payments made up to that time. In purchasing an annuity one should have precise information as to the date of the first payment, one beginning at 65, for example, means a payment at the end of the year after one is 65 years old, really at the 66th birthday.

The immediate, or life annuity is one secured by paying down a lump sum in advance, the annuitant to receive a stipulated sum beginning immediately and continuing through the rest of his life. If one puts a given sum at interest, one would secure not over 5 or 6 percent upon it in investments that are entirely safe; the same sum put in annuity form will often give an annual income that is 7, 8, 9, or more percent of the principal, depending upon the age of the person, because payments gradually use up the principal as well as the interest. Annuities are usually purchased by persons of 60 years, or older, as the best way of guaranteeing themselves an income for the rest of their lives. Facts as to average longevity for the particular age of annuitant form a basis for calculating annuities similar to that of life insurance for the same age. Under life insurance a definite number of premium payments may be ex-

pected from the average man of 65 before his death; under the annuity contract the company may expect to pay a similar number of payments to the annuitant of 65 before his death. At death, the life annuity ceases, whether few or many payments have been made; the company is able to meet the situation, since on the average, the payments required are those of the expected survival period for the age concerned. Women have a greater longevity than men annuitants, hence their payments for any given age are smaller than for men, as it is anticipated that more payments will have to be made. Men of 50 years, for any given sum, can secure a life annuity of about 6.5 percent per year of the capital sum; at 55 years the annuity is about 7.4 percent; at 60 years about 8.6 percent; at 65, 10.2 percent; at 70, 12.4 percent; at 75, 15.3 percent. The corresponding annuities for a woman are: at 50 years 6.2 percent; at 55, 6.9 percent; at 60, 7.9 percent; at 65, 9.3 percent; at 70, 11.3 percent; and at 75 years, 13.7 percent. The rates would vary slightly, of course, with different companies selling annuities.

The "deferred annuity" is so-called, because the first annuity payment is to be made at some future date named in the contract. Such annuities are often purchased by making periodical payments, and allowing them to accumulate at compound interest until the time of the first annuity payment. Thus, a person may pay in about $425 a year for 20 years, and then, beginning at 55 years of age, receive an annual income of $1000 a year for the rest of his life; but in case of his death before that time no return is made to his estate. Contracts can also be secured at a higher cost, which provide for a return of all premiums paid, in case of death before the annuity payments begin. Such annuities make an excellent method of saving.

An annuity with a guaranteed number of payments can be secured where conditions render it important that a minimum number of payments, say for ten or twenty years, will certainly be paid. For example, an annuity contract may provide that $100 or $500 a year will be paid for the life of the annuitant,

and that twenty payments, at least, will be made to the annuitant, or his estate. Such an income left to a mother of children will carry them through the twenty years, at least, while they are equipping themselves for self-support, and will continue annual payments to the mother as long as she may live.

The "last survivor" annuity provides a joint annual payment, so long as two persons live, and continues the payment for the full amount (or a reduced amount), during the life of the survivor. This will provide an income for a husband and wife who wish to make provision simply for themselves; or to two persons who make their home together.

Life insurance an American institution.—Life insurance received a tremendous impetus during the war, when over four and a half million men in Government service took out yearly renewable life insurance to the amount of about forty billion dollars in the United States Government War Risk Insurance. While most of it was given up after the war, approximately three billions of it was being continued in the yearly renewable form in 1921, and over 300,000 policies had been issued since the Armistice in more usual forms aggregating about one billion dollars of insurance with the Government.

In the American regular insurance companies there were in force in 1919 14,460,828 policies in ordinary companies, amounting to twenty-nine and a quarter billions of dollars, and in addition, over forty-three million "industrial," or small-face policies to an amount of over six billions. In all, fifty-eight million policies were in force for thirty-five billion dollars. The total income of the companies (largely payments from policy holders) was over one and a half billion dollars in 1919, or about 2½ percent of the income of the American people that year. The assets of the companies were 6.7 billions, or more than the resources of the 1719 savings banks of the country. Life insurance is evidently a very important American thrift institution.

Summary:—To-day's income must not only meet the needs of to-day but must provide for the large emergencies and pos-

sibilities of the future, and pressing future needs should be the first charge on income.

The periodical receipt of money income should mean as regularly the transfer of the allotted savings item to bank, or building loan association or other institutions of accumulation, and to life insurance, and the gradual acquirement of sound investments, smaller or greater in amount according to income. This should be the practice of every family from minimum wage-earners up, for reasons of social advantage as well as of personal protection. Then there should follow the allotting of the balance of current income to food, shelter and other present needs.

ADDITIONAL REFERENCES

Babson, R. W. *Bonds and Stocks; The Elements of Successful Investing.* Wellesley Hills, Mass., 1919.

Huebner, S. S. *Life Insurance.* Appleton, 1915.

Jones, E. D. *Investment.* New York Alexander Hamilton Institute, 1917.

Lagerquist, W. E. *Investment Analysis.* Macmillan, 1921.

CHAPTER VI

HOUSING AND THE HOME

Housing and quality of life.—Our housing is the most important item in the objective environment that conditions quality of life. As J. S. Nettlefold, author of the English *Practical Housing*, puts it, "The housing problem is not merely a question of building houses—it is also a question of building character."

The house has a direct relation to the *physical life* of man, in that it protects him from the discomforts of hot and cold weather, of wind, rain and snow, and from the ground and its dampness. Like our clothing, it throws a protective covering over us that safeguards physical well-being. The house affects health, also, by the degree of access which it gives to light, air, and sunlight, and to the ground area. Air and sunlight are as essential as food, and housing types that do not furnish these essentials should be condemned outright—the fight for light and air in respect to housing and for open space about our houses as some one has said must be the crusade of this century, as that for pure water and sewers was of the last century. The house affects health not only by the adequacy of its sanitary facilities for the disposal of bodily and other waste, but also by the conditions afforded for physical and mental rest and recuperation through sleep, rest, privacy, family recreation, and physical activities in and about the home.

The house serves our *personal and social nature* not only in terms of the family group but also by giving us that privacy and separateness necessary for individual development and

expression. The house is a curtain dropped between us and the world, and woe to personal qualities when living becomes so congested that housing no longer gives privacy for the family group and privacy indeed for the individuals within the family. The house with its grounds is an unrivaled school for the child, and a source of interesting experiences for the adult. The house contributes largely to the associations of "home," and is thus a source of comfort and satisfaction to the average person. The house with its grounds is often pliable material for esthetic expression; and domestic architecture and household furnishings are, with clothing, the most universal sources of esthetic satisfaction. The house is the family center for wider social relations, as those of hospitality to relatives and friends.

In its *economic aspects* the house is an example of specialized fixed capital. It is a series of embodied services, shelter-use, which it gives off day by day so long as it exists. The house, classified in relation to production and consumption, may be said to be an article of consumption capital, so far as it contributes directly to the final satisfactions of its occupants through the comfort, rest, recreation of the home; while so far as it is used as an intermediate agent, as a workshop for the housework of kitchen, laundry, and the like, the house is an item of productive capital. Classified as regards ownership, the house is acquisitive capital which brings a money income, or its equivalent in use-income, to its owner.

The house is itself property, and it also shelters and safeguards the other personal property of the family against spoilage by weather, against loss and theft. In particular as a storehouse, it carries our goods along from the time when they are not particularly needed to the season when they are again useful, and thus it serves constantly to create "utilities of time," and to add to the satisfaction-giving power of commodities.

The house and its grounds are embodied economic values that, like investments, can be drawn upon to meet needs as

they arise. So far as they increase in value, whether as added to by enlargement or purchase, or as appreciating with the growth of the community, they have an accumulating function for the family similar to that of a savings fund—indeed, purchasing a home is the most common method of saving. The owned home has an equalizing function as regards real income, so that we live as well in one year as in another so far as we draw upon the stored-up services of the house and its furnishings. The house, like land, is immovable property, and this fact often qualifies its utility, as when a house owner finds it necessary to move to another community. House ownership gives access to land, at least a small area, and the two together as real property have a special status, as illustrated in the inheritance law. House and land are visible property, and hence home ownership tends to give its owner a certain social status—leading sometimes to extravagant housing expenditure for appearances' sake. Home ownership tends, according to current belief, to create an interest in citizenship, in stability of government, and in "law and order"; certainly house ownership does create an interest in tax rates and in government expenditure, but unfortunately sometimes of a merely negative kind.

Area units in family housing.—The rooms of a family dwelling include the following units of area:

1. Service rooms: kitchen, laundry, sewing rooms, bath rooms, furnace rooms, with related rooms as food storage, fuel supply, linen room, etc.

2. Family living rooms including the living room, so-called, dining room, music room, library, "parlor" and reception rooms, veranda and all rooms used for group living, for social activities, and for the placing of property of common use.

3. Rest rooms or individual chambers, which provide sleeping accommodations, privacy, and the care of individual property.

4. Connecting ways as porches, vestibules, halls, corridors, stairs.

Mrs. Young[1] in discussing the area necessary for housing suggests the principle that a house should provide "an amount of space less than that which would involve waste and greater than that which would involve friction." The sleeping area in a normal two-story dwelling equals the sum of the working and living space. The working space is to the living space in a proportion varying from 10 percent in an apartment to 25 percent in a suburban house and 50 percent in a farm house. Sleeping accommodations give the clue to the total area required for housing a family.

Types of family housing.—These area units of family housing are combined to give various types of family dwellings, including the one-family detached house standing entirely apart, two-family structures of various kinds, row houses, and multiple houses which shelter three or more families under a single roof.

The *single-family detached house* provides optimum living conditions as to: (1) privacy of family life and freedom for the family and for its individuals; (2) access to sunlight and to outer air, since four corner rooms can be placed on each floor with windows opening on two sides, it stands four-square to all the winds that blow; (3) access to ground with play space for children, garden, etc., forming an environment of educational essentials for the child, and a center of wholesome interest for the adults; (4) flexibility in exterior and interior design, in room arrangements, in alterations, permitting practical adjustments to family needs; (5) minimum fire risk; and (6) possibility of ownership, and a permanent family home with the personal and social advantages elsewhere presented, thus providing a zone of freedom for the family that is sorely needed in modern life.

Its cost of construction may be higher than in some types of group dwellings; it will cost more to heat than a corresponding area in a multiple family dwelling; it will require oversight

[1] Young, Helen B. "The Development of the House," *Journal of Home Economics*, 1917, p. 349 ff.

for care of property, for repairs, for up-keep of the surrounding land, and more detailed service in household management, since there is no aid from janitor or building superintendent. But effort is always the price of freedom, and who would not agree that freedom is worth it. As the International Congress at Paris in 1889 declared, "Whenever the economic conditions admit of it, detached dwellings with small gardens should be preferred in the interests of the workman and his family," and one might add for families on all levels of income.

The *single-family semi-detached house,* in units of two houses with a common party-wall, sacrifices two corner rooms on each floor and light and air along one side for the economies of a party wall and a narrow lot. It keeps one side yard as well as a front and rear yard. Such semi-detached houses are sometimes built three or four to a unit (approximating the row type), with further construction economies, and, the architects tell us, with increased opportunity for pleasing results in exterior design, but with progressive encroachments on privacy, and on access to ground area and to air and sunlight.

The *row house,* built with two party walls, sacrifices all corner rooms and light and air along both sides for the economies of a lot only as wide as the house itself. If built only two rooms deep, it gives direct exposure to street or rear yard for each room, but cross-ventilation for rooms, an invaluable factor, is lost. One example of the row house is the expensive city house, with its traditional brown stone front; it is often built three rooms deep and has corresponding difficulties of ventilation, and three or four stories high, with corresponding lost energy in working a house that has many different levels. Shorn of lawns and open space about it, of porches even, this expensive type of city house is giving way in many places to the apartment. Another example of the row house is the workingman's two-story five or six-room dwelling. It is less expensive to build and to heat than is the detached house; it uses two party walls, but its economy is offset by loss of privacy, air, sunlight and optimum ventilation,

and hence by the probability of increased sickness. Fire risk is increased, and there can be little or no individuality in exterior design or inner room planning. The row house is still an individual home, however, and as regards the elements of privacy, air, and ground space and number of persons per acre which affects street and play congestion, it is far preferable to the multiple dwelling. It has lost, however, the essential elements of a complete housing standard, and represents a sacrifice made to high land value which is to be avoided, wherever the sacrifice has not already been made, by far-sighted control of land.

The *two-family detached house,* to accommodate one family on each floor, gives each family the advantage of living on a single level as in an apartment; it has corner rooms and free access to light and air for each family; it has building economies as regards foundation, outside walls and roof. If there is sufficient space to assign a yard to each family, with separate entrances, with separate porches above and below, the two-family house may approach the detached house in material accommodations, but usually it does not provide equally good material conditions, and socially, it loses in privacy over the one-family house. This "two-flatter" usually goes with over-crowded land so that light and air and ground space are likely to be inadequate. The fire risk is also increased. It involves a landlord's responsibility toward a lessee, and it makes ownership more difficult since a larger investment is required; but often it facilitates ownership for a family that can undertake the responsibility, since a profit is secured from rental of one-half the house that helps carry the whole cost. So one man with energy may secure a home for himself, and at the same time provide a less prudent family with rental shelter.

The *multiple dwelling,* for three or more families doing housekeeping on the premises, is the outcome of uncontrolled congestion of population. It distributes the high annual cost of the city building lot (a cost created by permitting congested

use) among several families instead of its being borne by one. Its construction costs per family are usually higher than for the detached house, and these, with high land charges, and cost for services furnished with housing, give high rental for apartments. Even under the restrictive standards of the housing laws, light and air are inadequately supplied since corner rooms with double exposure are rarely found, and sunlight is lacking, or usually reaches one side only of an apartment. Ground area for children has disappeared and even in "garden apartments" it is a formal grass plot, and play must be had in the street or in a formal public playground; "my backyard," that stimulus to individuality, invention, and leadership among children, is gone. Personal ownership of housing is practically impossible, although cooperative methods may remove this drawback. Housekeeping is facilitated by living on one floor, by janitor service for common halls, stairs, sidewalk, garbage disposal, heating and hot water supply. These services usually, often with elevator, and possibly with telephone and maid service, are paid for in rent. The apartment has a location advantage, since it is often placed near the central business, shopping, and theater district. It permits such massing of people that the outside interests of the business man, the housekeeper, the children are within walking distance, or at least a short car ride. From the point of view of the man financing a family, the apartment centers in one definite monthly charge, items that would vary in ordinary housekeeping; from the point of view of the woman doing housework it reduces tasks and responsibilities; it is the easy path. There are difficulties and disappointments in this easy way, however. There is lack of control over the services rendered about the house; other families, in close proximity, of obnoxious character or habits, may make life disagreeable; for the higher income families, exorbitant apartment house rental makes a well-rounded scheme of life difficult. For workingmen's families, high rents lead to the lodger evil, and to room over-crowding generally, with its intrusion upon privacy and

lack of facilities for reasonable rest and recreation. While for adults busy in outside interests, an apartment with its approach to hotel conveniences but retaining a separate living unit, may satisfy as a nightly haven of refuge, yet for normal family life with growing children it is an extremely unsatisfactory environment. Once introduced, apartments create land values so high that there is no return to detached house construction; their construction must be restrained in advance, as they can be by zoning laws, if the reasonable housing standard of the detached house is to be maintained. This is one of the most critical problems in the housing field.

An official of the English Ministry of Health recently collected first hand experiences of young people living in block or tenement dwellings which point out the pressure of public opinion of neighbors close at hand, the irksomeness of sharing domestic conveniences with other families, the impossibility of securing quiet yet the need at times of making noise oneself, the difficulty of getting exercise, the impossibility of keeping pets, etc.,—which lead these young people to prefer detached housing.[1]

That single-family housing, even in sub-standard living, tends to be more sanitary than tenement housing is indicated by a survey of 5595 families receiving charitable relief in Baltimore, a city of detached houses: 4789 families had no room without an outside window, and 733 of the balance lived in houses with only one dark room, and only 73 families were in houses with two or more dark rooms. Of 5904 families, 3018 were sole occupants of their dwelling and in only 844 families was there over-crowding.[2] Although these families found it necessary to accept relief, yet their housing standards, made possible by a detached housing situation, were well above the unhygienic conditions common in tenement housing even for families well above the poverty line.

[1] Quoted in *Housing Betterment*. New York, 1921, p. 248. For an American analysis of apartment house evils, see: Newman, B. J. *Housing Problems in America*. 1916, p. 153.

[2] *Poverty in Baltimore*, 1916-17, p. 17.

Standards for family housing.—The desirable standard for family life with children requires a detached house with open space about it on all sides, with adequate area for lawn and garden supplied by a lot of at least 5000 square feet, or 50 x 100 feet. While present housing conditions include tenement and row houses, advance restriction of an area to the construction of detached houses will hold land values down to the level appropriate to this kind of housing. Details of legal standards for family housing are described elsewhere; here a general outline of standards as affected by income is stated.

The minimum standard for a laborer's family with an income from $1200-$1500, is a five-room cottage, with kitchen and dining room at rear, living room at front, available as an emergency bedroom; three chambers above, with bath room; kitchen equipped with stove and water heater, sink, two laundry tubs, and storage closets. The kitchen, living room and large bedroom would be each about 10 x 12 to 12 x 14 feet; the small bedrooms, at least 9 x 10 feet. One stove in the kitchen will heat the house, with occasionally a second fire. The minimum standard has been often stated at four rooms, but for a family with boys and girls, two bedrooms besides the parents' room are needed, and the living room should not be relied upon regularly as a sleeping room.

In the minimum standard shall the kitchen be made simply large enough to serve as a cooking and laundry room, the family to eat in the living room, or shall the kitchen be made large enough to serve also as a dining room and general living room? The latter arrangement on the whole is preferable as it economizes on heat, on work, and supervision of children, and leaves the other downstairs room as a room for children's home study, for callers, for emergency sleeping, and other uses that would be less well served if the family ate in the room. It provides a "best room," that subtile influence for social progress.

Low paid workers customarily have been housed in the cast-off houses of the class next better-off; hence any building of

houses for standard wage-earners theoretically at least releases houses for the poorer group. At last attention is being given to housing the small income group. Mrs. Wood in her *Housing the Unskilled Wage-Earner* urges government loans, if necessary, especially to provide for this group. The federal government in its war housing provided four and five room houses, particularly for laborers, and good housing developments by employers are recognizing this group. It is sometimes said that the lowest paid group cannot own its homes. Doubtless it is difficult, but if social assistance is given as by corporation leadership and cooperative enterprises, ownership can be made possible and the results in terms of industrial motive will make the effort especially remunerative to society.

The housing of racial and immigrant groups presents special problems as there is often a tendency to exploit them. The standard for them should be the same as for others of similar income, in other words an "American standard of housing"; and attention should be directed to their needs, lest such groups be given housing treatment that is not alone unfair for them but also of danger to general standards of housing.

The comfort standard, for skilled laborers or clerical workers with incomes from $1800-$2200 or thereabouts, calls for a house of six rooms—kitchen, dining room, and living room, three bed rooms and bath, a front porch, and a central heating plant. The "best room" factor will definitely appear in this standard. The garage will appear occasionally with this standard.

The moderate standard, for families with incomes of $2500 to $5000 or thereabouts, calls for six to ten rooms, with kitchen, dining room, living room and possibly reception or music room or den or library, three or four or more bed rooms, one or two bath rooms and possibly laundry room, screened summer kitchen, sleeping porch, garage. The maid's room will occasionally appear in this standard.

The liberal standard for families with incomes from $6000 to $25,000 or more, calls for ten to twenty rooms or more, kitchen,

laundry, dining room, living room, reception room, music room, library, five or more bed rooms, two or more baths and lavatories, maids' rooms and bath; garage. This standard will probably also include a library, sewing room, children's nursery, guest rooms, summer kitchen, sleeping porches, office room, etc.

Housing standards for man and wife.—A minimum housing unit for two adults comprises two rooms, a kitchen and living room combined, and a bed room with bath. A comfort standard would add, at least, another living room. A moderate standard would provide at least five rooms, kitchen, dining room, living room, two bed rooms, with possibly sleeping porch and a garage. A liberal standard would include in addition extra specialized living rooms as den, music room, library, extra bed rooms for guests, rooms for maid, etc.

An important standard is that of the young couple starting out in life. The immediate purchase of a permanent home may be recommended, unless residence in the community is to be temporary. A five or six room house may be recommended, as the initial step in a program of family building. An interesting development which precisely meets the needs of the young couple is the unit house which can be erected as a complete three-room house and to which two, three or more rooms can be added to make a complete five or six room house. This type has recently been developed so successfully that at either stage it makes an attractive structure on which loans will be made. Thus in Minneapolis, units of "installment building" have recently been erected at $2700 to $3500, the house to be completed later at $5000.[1] Another suggested plan is the building of small apartments to rent to young couples who at the same time are encouraged to start a building loan fund and plan to purchase a detached house when their family increases.[2]

[1] *Housing Betterment.* New York, June, 1921, p. 134.

[2] Ham, W. H., of Bridgeport Housing Co., *Housing Problems in America,* 1920, p. 95.

In institution housing, the modern tendency approves the standard of small group or cottage organization instead of large congregate buildings. Smaller groups give conditions more like the normal family. Attention to better housing standards is needed even in educational institutions; one college dormitory is reported with sleeping rooms without windows. The adoption of the government's war housing standards as specified for hotels and lodging houses for men and for women or the standards of the model housing law (Chapter VII) would at once give better living conditions than some institutions now provide.

Housing in labor camps presents a special problem of handling groups usually of detached workingmen, sometimes however including detached women and family groups. Up to ten years ago these workers had received no special consideration; then a riot among hop pickers at Wheatland, California, led to action by that State and its Commission on Immigration and Housing drafted standard designs for sleeping quarters, dining and cooking houses, sanitary toilets, etc., for labor camps that were introduced first by a system of instructive inspection and later made obligatory by law.[1] These California standards have had a wide influence. The latest state labor or housing laws are providing standards for labor camp housing and corporations such as the Pennsylvania Railroad have progressive policies in this regard. Corporation leadership is especially important, as in housing wage-earning families.

Housing for women.—Bosworth in an early study of wage-earning women in Boston[2] found an almost universal longing for a home, which led to strenuous efforts to secure separate housing accommodation rather than a room in a lodging house. Group living was possible where incomes were larger and gave more satisfaction than a lodging house or a working girl's home.

[1] See: Reports of Commission, especially its pamphlets on Labor Camp sanitation; also, *Survey,* Nov. 8, 1919, "California's Labor Camps"; also Report of Ohio Labor Department on Labor Camps.

[2] Bosworth, L. M. *Living Wage of Women Workers.* 1911, p. 19.

Bosworth urges that housing reform if attempted meet the girl's demands for cooperative living or living in family groups.

An investigation just made of housing of non-family women in Chicago [1] shows that there are about 3185 women accommodated in 48 of the 50 institutional homes and residence clubs discovered in the city and that the great majority live in furnished rooms in private families or rooming houses. Of 300 such rooms examined the charges varied from $3 to $15 a week, with the median cost of $8 a week. A survey showed that bathing accommodations varied widely, the median number of persons per bath-room being six. One hundred and eleven of the rooms offered some housekeeping privileges, 242 offered laundry privileges. Two hundred and fifty-eight had good ventilation, 33 fair and 9 poor. With regard to the appearance and furnishings of the rooms, 53 were rated as very good, 176 as comfortable, and 71 as poor. The attitude of the householder toward lodgers was rated as: 187, kindly; 67, commercial; 35, unpleasant; 11, no report. Finally the rooms were graded as (A) meaning good in practically all essentials, (B) as a medium house, surroundings and housekeeper, (C) as the sort of place one is forced to accept. On this scale no house was placed in grade (A), 215 were of grade (B) and 85 of grade (C). The rooms were investigated by making inquiry in houses having window-signs of furnished rooms and this probably explains the absence of grade (A) rooms. Inquiry was made as to opportunities for receiving men callers:—103 or one-third could not have men call in the house; 50 could receive them in a parlor; and 147 or one-half could receive them in the rented room.

The general conclusion of this Chicago study of housing for women was that there is need of increased facilities in special boarding houses and residence clubs and of supervision of furnished room facilities by room registries properly managed,

[1] Trotter, Amy. *Housing of Non-Family Women in Chicago,* Community Trust, 1921. See a similar study of New York conditions: *Housing Conditions of Employed Women in the Borough of Manhattan.* Bureau of Social Hygiene, New York, 1922.

which will provide for visiting and inspecting rooms and consulting references before furnished rooms are placed on the recommended list. The investigation also presents facts as to the housing problems of special groups, and shows the need of special homes or clubs for very young employed girls, for waitresses and others who get meals at places of employment and have night work, for students under twenty years of age, for stage women, and for transients, and also women's hotels with reasonable prices and one or more travelers' aid lodges for emergency cases.

Housing of non-family individuals, both men and women, is increasingly important with the growth of cities, and especially as regards women now going into industry. It had special attention in the government's war-housing standards, which provided in effect standardized hotels and lodging houses for detached men and women. Interesting details of women's hotels were: the size of each unit to accommodate 75 to 150 persons; individual sleeping rooms of 70 square feet minimum; large parlors and numerous small parlors (one to 20 persons) on the first floor; and a sitting room, sewing room and kitchenette on alternate floors.[1] The National Board of the Y. W. C. A. is promoting better housing for women throughout the country, by its own provision of dormitories, hotels, and club houses, and by stimulating local surveys of conditions. It is providing constructive plans for housing for women workers of various groups. This organization urges the principle of no subsidized housing for women workers, all undertakings to be on a self-sustaining basis paying reasonable return on capital invested.[2]

"The Association to Promote Proper Housing For Girls," New York, conducts two self-supporting "Community Clubs," and has also affiliated model rooming houses managed by their

[1] Veiller, Lawrence. *Model Housing Law,* 1920, pp. 366-370.

[2] Geary, Blanche. *Survey,* 45 (1921), p. 570. For further information, address National Board Y. W. C. A., New York. Esther Packard's *Living Conditions of Self-Supporting Women in New York City,* Y. W. C. A. (out of print), gives conditions about 1915.

own owners but under the supervision of the Association. Its houses avoid institutionalism and rules and apply the cottage or club system to housing girls in cities, emphasizing the development of group friendliness in each house. Each house is entirely self-supporting and aims to pay 10 percent on the investment, and additional capital is solicited to extend the system. The organization maintains a "hostess club" for landladies of the Bureau's list and through them works practically to improve conditions generally in rooming houses. The organization holds an annual conference on housing problems of girls and in this and other ways is extending its principles to other cities. The simplicity and effectiveness of its program for working through a registry list of approved lodging-house "hostesses" merits widespread imitation. The Association's "room registry" on which it lists rooms for rent all over the city only after they have been examined by its inspectors, a service found in other cities, should become a part of the housing policy everywhere.

The Beekman Cooperative apartments and the Country Cottage Co., both New York enterprises for professional women, give special types of housing for those on comfortable incomes.

The desideratum is to provide upon a self-supporting basis suitable housing that will meet the needs of women away from home and be within reach of their purse. And suitable shelter, as Miss Geary said recently, must meet the three standards of economy, beauty and privacy.

Housing for unmarried men.—The housing problem concerns the detached young man as much as it does the young woman although the country is as yet hardly conscious of the fact. The Y. M. C. A. and similar organizations are in the field with inexpensive housing on the dormitory plan, and in the largest cities commercial enterprises furnish special housing exclusively for single men, a problem which also had attention in the Government's war-housing. For both single men and women there are now available improvements over

the lodging house and boarding house, needs which have long merited attention.[1]

Housing of college women.—A recent report shows that while 68 percent of women students in New England colleges live in college-owned buildings, and 45 percent at the South, the percentage so housed in the rest of the country is from 17 to 7 percent. The report points out the desirability of college-controlled housing; suggests the cottage type of housing; urges the value of fresh air, daylight, pure water and sanitary plumbing; raises the problem of facilities for self-support, so as to reduce living expenses; urges consideration of the "social plant," that is the providing of not too large dining rooms and family-size tables so that the household atmosphere may be developed, and the kitchenette for occasional use, reception rooms and small parlors. The report states that the standard of the single room per student for sleeping and study is generally recommended.[2]

Standards of over-crowding.—Over-crowding standards are stated sometimes in terms of the required cubic feet of air space per adult and per child occupant, for example 400 cubic feet for the adult and 200 for the child, on the assumption that this much air is necessary. This is an unsatisfactory standard, as a certain room may be well ventilated, even with a large number of persons in it, because of windows on both sides or cross drafts, while another room of similar cubic contents but no ventilation may be over-crowded with one or two persons in it. Another over-crowding standard is in terms of the number of persons living in a given number of rooms, for example, Chapin's New York rule (1907) that an average of more than 1½ persons per room counting all rooms consti-

[1] See Wolfe, A. B. *Lodging Housing Problem in Boston*, 1906. Louise Bosworth. *Living Wage of Women Workers in Boston;* "Housing of Women Workers in Washington," *Monthly Labor Review*, March, 1918, p. 1. Hunt, M. B. "Housing of Non-Family Groups in Chicago," *American Journal of Sociology*, 16, pp. 145. Reports of Association to Promote Proper Housing for Girls, New York.

[2] "Housing of Women Students at College." Housing Committee of American Association of University Women. *Journal of Association*. July, 1922.

tutes over-crowding, or the commonly accepted higher standard of one person per room as constituting satisfactory housing conditions; but this does not take account of conditions of family relationship, sex, age, etc. as modifying over-crowding. The Model Housing Law leaves the decision to the health officer when complaint of over-crowding is made. Over-crowding could be defined as the absence of any of the following conditions:

1. A separate housing unit for each natural family, with its own toilet accommodations. Two or more families in a single house violate this principle, unless each has a self-contained set of rooms entirely shut off from the other, with separate toilet.

2. Lodgers, if living within a family, must have separate room and separate toilet accommodation. The government's war-housing standards provided a type of house with detached rooms and separate toilet for a family keeping boarders.

3. Separate bed rooms for boys and for girls, with a separate bed room for parents.

4. Not over one person in a room except in case of husband and wife, a small child in parents' room, or brothers in a room, or sisters in a room.

5. One room at least for the common life of family not used for sleeping (may be kitchen, or kitchen and dining room, or living room or some other).

6. Not over ten detached houses to the net acre of land used, that is, a lot approximately 40 x 100. England's after-war government housing sets standards of 8 houses to the acre in suburbs and 12 in more congested areas. Where row construction is necessary, 20 such houses may be placed on an acre. (This point, No. 6, concerns land over-crowding or congestion so called, in distinction to room over-crowding.)

7. One person per room in institution or group housing.

Housing cost in the family budget.—Housing is a standing charge that usually takes from one-tenth to one-quarter or even more of the family income. Reports indicate in the larg-

est cities rentals of one-third up to one-half or more of the income in extreme cases. Where the house is owned, careless thinking recognizes only the cash outlay for taxes, repairs, fire insurance and interest on a mortgage if there is one; yet the unnoticed interest loss on one's own capital invested in the house (which one might have if one's investment were an interest-paying bond) and the unnoticed depreciation in value due to obsolescence as well as wear and tear, are real outgoes in house ownership which one is actually paying each year even if no account book records the items.

The annual cost for housing will vary with various conditions. The larger the income the larger the absolute amount that will be paid for housing; but as various investigations have shown as workingmen's incomes increase the proportion spent for rent tends to decline slightly. In workingmen's budgets of the United States, 1901-02, Cost of Living Study, the housing percentage dropped slightly from 18.4 to 17.4 percent as incomes increased from $500 to $1200; similarly, in Chapin's New York Study (1907), the percentage dropped from 26 percent, due to high rents in the metropolis taking more than a quarter of the income, down to around 18 percent. Beyer found in Philadelphia (1918) a general decrease in the rent percentage in the budget from 20.5 percent at $600 to 12.3 percent at $1800, with an average of 14.1 percent. In the United States 1918-19 study the rent percentage dropped from 14.5 to 10.6 as incomes increased from under $900 to over $2500. Ogburn's equation of rent shows a decreasing percentage as income increases. The average percent in the American workingmen's fair minimum budget is 17.3 for rent. The average rent percentage in six minimum comfort budgets was 13.4.[1] For somewhat larger incomes, Ellen H. Richards allowed 20 percent more or less.

Engel's European figures for 65 years ago allowed an unchanging 12 percent for rent on all income levels; the Massachusetts workingmen's budgets of 1885 showed that from

[1] *Family Budgets of American Wage Earners. Op. cit.*, p. 37.

18 or 20 down to 15 percent was spent for rent, and those of 1901 showed percentages from 21 percent down to about 7 percent. A recent investigator reports in Belgium 10 percent as a standard rent and in Holland 16 percent, the Dutch workman getting a better type of house.[1]

The rule of working families in New York not to spend more than one week's wage for a month's rent tends to allow too large a proportion, even for a maximum charge, so much indeed that other needs are encroached upon; a fair rule is to allow for the week's rent one day's wages, or 16-2/3 percent which is close to the average of 17.3 percent.

Annual housing cost is also a function of size of family. One might assume that it would vary directly with the size of family, since with a larger family more housing space would be desirable. Ogburn has shown that on the contrary rent expenditure varies inversely with size of family. The reason for this is that on a given income as family size increases, food and clothing expenditures take precedence over shelter cost since all must be fed and clothed, and the necessary increase in those outgoes reduces the allowance for housing.

House value in relation to income.—The value of one's house should bear a reasonable relation to the size of one's income, and the proper proportion is usually stated as not over two times one's income; for example a $6000 house is in the right proportion to a $3000 income. Or, if one is living on an income from investments one should not transfer more than about 12 percent of one's capital into one's home. If rental property is on the old 10 percent basis, it is demonstrable that paying 20 percent rent will provide the same type of house that one can purchase for twice one's annual income.[2]

[1] *Housing Betterment*, 1921.

[2] Since 20 percent of the income which is the annual payment, is 10 percent of the value of the house, the full 100 percent of the value of the house is 10 times 20 percent of the income, or 200 percent of the income, or twice the income.

Or if one lives on 6 percent investment income, when rentals are about 10 percent of the value of a house, and when one pays in rent 20 percent of one's income, then transferring 12 percent of one's capital into a house, will

INCOME AND HOUSING.[1]

YOUR INCOME	ANNUAL RENT OR ANNUAL COST OF YOUR OWN HOUSE, WILL AVERAGE ONE FIFTH OF YOUR INCOME	AVERAGE COST OF HOUSE AND LOT PER INCOME	THIS SHARE OF THE COST GOES INTO THE HOUSE	ESTIMATED SIZE OF HOUSE YOU CAN BUILD AT A COST OF 30 CENTS A CUBIC FOOT FOR THE AMOUNTS GIVEN IN COLUMN 4	ESTIMATED SIZE OF HOUSE YOU CAN BUILD AT 50 CENTS A CUBIC FOOT, WHICH IS THE COST OF THE HIGHER CLASS OF PRIVATE HOMES
$2,000	$400	$4,000	$3,200	A very small 3 or 4 room bungalow without a cellar	
2,500	500	5,000	4,000	18′ x 25′. Area 450 sq. ft. A small 4 room house, volume 13,300 cu. ft.	
3,000	600	6,000	4,800	A 4 or 5 room house 20′ x 27′. Area 540 sq. ft. Volume 16,000 cu. ft.	
3,500	700	7,000	5,600	A 5 or 6 room house 20′ x 29′. Area 580 sq. ft. Volume 18,666 cu. ft.	A small 3 or 4 room bungalow without cellar
4,000	800	8,000	6,400	A 6 or 7 room house 20′ x 37′. Area 740 sq. ft. Volume 21,330 cu. ft.	A small 4 room house 18′ x 25′. Area 450 sq. ft. Volume 12,800 cu. ft.
5,000	1,000	10,000	8,000	A 7 or 8 room house 23′ x 40′. Area 920 sq. ft. Volume 26,650 cu. ft.	A 4 or 5 room house 20′ x 27′. Area 540 sq. ft. Volume 16,000 cu. ft.

6,000	1,200	12,000	9,600	An 8 or 9 room house 27′ x 40′. Area 1,080 sq. ft. Volume 32,000 cu. ft.	A 5 or 6 room house 24′ x 28′. Area 672 sq. ft. Volume 19,200 cu. ft.
8,000	1,600	16,000	12,800	A 9 or 10 room house 34′ x 40′. Area 1,360 sq. ft. Volume 42,660 cu. ft.	A 7 room house 25′ x 32′. Area 800 sq. ft. Volume 25,600 cu. ft.
10,000	2,000	20,000	16,000	A 10 or 11 room house 30′ x 58′. Area 1,740 sq. ft. Volume 53,000 cu. ft.	An 8 room house 30′ x 35′. Area 1,050 sq. ft. Volume 32,000 cu. ft.

[1] Ackerman, Frederick L. *American Magazine*, April, 1921. The table above is in condensed form.

Now that housing construction costs are nearly double what they were, there is a tendency for persons whose incomes have not advanced proportionately to build as elaborately as they could have done on the old scale of prices. Such a measure will bring a double burden on them, first because their capital investment will tend to be three or four times their annual income instead of the conservative figure of twice the annual income, and next because the cost of upkeep is now likely to be considerably above the old level. If a family on $3000 buys an 8-room house for $8000 or $9000 (instead of the old figure of $5000 or $6000) it has undertaken a large burden in the purchase itself, and the annual upkeep of such a house is also out of proportion to their income, and hence likely to be fatal to all well-rounded living.

Mr. Ackerman, the architect, has given the accompanying table (p. 194-5) to show the relation between income and the house one can afford.

Cost of house construction before the war was an average of $500 per room for frame construction; this doubled or more during and after the war and has just begun to recede so that it may be placed at $800-$1000 per room in 1922. The English government has estimated that housing costs in 1927 will still be 2/3 above pre-war levels. Building materials at the peak cost 299.7 in April, 1920, compared with 100 in 1913, and had receded to 172.4 in August, 1922. In 1923, they are again increasing.

Costs of building are often estimated at so much per cubic foot of the cubage of the house (its length, breadth and average height multiplied together). Thirty cents a cubic foot for cheaper construction was given in 1921 as average costs for the United States. There has been a beginning of cost reduction by quantity production in house construction: (a) a number of houses handled by a single company with reduc-

provide the same type of house. One is paying in rent 1/5 of 6 percent of one's capital, or 1.2 percent of one's capital; ten times this or 12 percent of one's capital will purchase a similar house.

tion of overhead costs, economies in buying materials, etc.; and (b) by standardization of parts of houses, illustrated by certain forms of concrete construction. Whether apartment construction costs more than the detached house depends partly on whether the apartment is a frame structure or, as it should be, of fire-resistive construction. The practical outcome seems certain that in apartment housing dollar for dollar the tenant gets less accommodation as the size of the apartment house increases. Aronovici has shown in summarizing housing surveys in 26 cities that with the increase in height of buildings there is a decrease in number of rooms per apartment and a decrease in the size of the rooms, but that rent does not decrease.

The problem of the cheap but well-built house for the workingman is the most important single structural problem in housing. This is partly a financial matter and Mr. Frankel has pointed out some of the considerations that enter: the purchaser must be prepared to make a small initial payment; the securing of a long-term mortgage with a reasonable interest rate; the carrying of life insurance equal to the mortgage so that in case of the wage-earner's death the family will be able to pay off the mortgage; the avoidance of speculative profits in building.[1]

Hamlin's review of "Low Cost Cottage Construction in America" [2] shows comparative costs to be as follows, using clapboard frame construction as 100: frame shingled, 100.8; 8-inch common brick, 103.4; 8-inch face brick wall, 108.7; and stucco on metal lath, 103. Prices on various other types of brick, tile, concrete and other construction showed no cost that exceeded 109.7 (stucco on brick, 9-inch wall) compared with clapboard at 100.

The advantage of brick and other non-deteriorating material is obvious, particularly as the cost is so little above that

[1] Frankel, Lee K. "Financing the Small House," *Housing Problems in America*, 1912, p. 96.

[2] Hamlin, Winthrop A. *Low Cost Cottage Construction in America.* Harvard University Publication.

of wood, so that lessened depreciation and upkeep charges will pay the extra cost in a few years.

It seems reasonable to expect in a few years, says another student of the problem, that, as a result of the coordination of development in building materials, in methods of using them, in standardization of forms and units and in the development of thoroughly evolved plans and conservative design, we shall have durable masonry structures, practically fire-proof, thoroughly sanitary and comfortable and of attractive appearance and at a cost so much below anything now possible that we will be far forward in the accomplishment of our ideals in low-cost housing.[1]

Ways of buying.—There are various methods of purchasing a house which may be indicated briefly thus:

1. Buying land and building for one's self; the construction may be done "by day's work" or under a general contract let to a builder.

2. Buying a new house just completed.

3. Buying an old house.

4. The purchase of a completed house may be made: from a builder; or from a real estate firm or other company which is carrying on building operations; or from an individual owner.

5. The methods of financing the purchase of a house include: all cash down; part cash and part to remain on a mortgage; buying on a contract whereby the deed is secured when a certain percentage of the value has been paid (this contract method is used with some monthly payment systems "in lieu of rent"); through a building loan association mortgage, paying perhaps 25-35 percent cash down and the balance as a 10-12 year mortgage, but paid off by monthly installments on interest and principal; through a first and second mortgage, the latter usually at higher rate of interest and paid off in a short

[1] Brainerd, Owen. "Types of Construction for Low Cost Houses." *Housing Problems in America*, 1917, p. 81. See also Atterbury, Grosvenor. "How to Get Low Cost Housing," *ibid.*

time by installments, the first mortgage being allowed to remain more or less permanently.

Rental in relation to house value.—There is a traditional figure that the annual rental charge is about 10 percent of the value of house and lot, and in ordinary times this has been a reasonable basis of estimating rentals as real estate agents testified before the Massachusetts Commission on the Cost of Living ten years ago. But with the recent necessity of paying high rates for money, and with high costs for housing repairs, for maintenance, for janitorial care where it is given, and also with a rising tax rate, real estate operators have been pressing for rentals of 12 or 13, even 15, percent on detached houses and 15 to 17 and even 20 percent on apartment house property.[1] For illustration, one may say that the old basic 10 percent rental on houses met the following costs: taxes, 2 percent more or less; repairs and depreciation, 2-4 percent; fire insurance, 1/5 of 1 percent; interest on investment including profits if any 5 to 7 percent. But taxes may go to 3 percent or more in some communities, money may cost 7 percent or even 8, or more and with high cost for labor and materials necessary in upkeep, it is evident that where any of these conditions prevail a 10 percent rate is not high enough.

Increase in rental costs.—The Massachusetts Commission on the Cost of Living pointed out in 1910 that rents increase more slowly than other items in the cost of living during a general upward period in prices for: (1) the landlord is not free to raise rent at will; (2) custom affects rent more than it does prices; (3) monopoly control of rent is almost impossible; (4) there are no fixed standards, or widespread knowledge of current rental rates (as through quotations in the press), to level-up rents to higher rates. This condition held true generally during the war increase of prices—rent was the last item to

[1] *Housing Betterment*, New York, June, 1921, p. 140. In 1919 real estate boards were suggesting a standard of 15 percent returns on residences; and reported an actual median of 13 percent, and suggested a standard of 20 percent on apartments and reported an actual median of 17 percent. The New York courts recognised a 15 percent rate on apartments as fair.

go up, and in 1923 rent is still going up in many communities to get in equilibrium with other costs. Monopoly power over rent appeared during this period, due to the housing shortage, and was the real justification for legislative interference with leases, requiring landlords to submit rent increases to court approval.

Rents increased an average of 51.1 percent in the six years from December, 1914, to December, 1920, according to facts for 32 American cities secured by the United States Bureau of Labor Statistics by collecting figures for from 200 to 500 properties in each city. The rises varied from 15 to 20 percent in the cities showing the least changes, San Francisco and Portland, Me., up to 90 and 108 percent for Norfolk and Detroit, the cities showing the greatest increases.

Rental review by court.—The rise in rents in 1919-20 caused an appeal to state legislatures for relief. Among the laws adopted were those of New York which insured tenants in New York City the right to hold over in occupancy until a fixed date in view of the shortage of housing and their inability to obtain suitable quarters elsewhere; and which also prohibited the charging of an unfair rent, and placed upon the landlord the burden of proving in court that an increased rent was just and reasonable. The law was attacked as unconstitutional but the State Court of Appeals and later the United States Supreme Court upheld the law as an exercise of the police power which "takes private property or limits its use when great public needs require, uncontrolled by the constitutional requirement of due process."

House ownership and rental.—The census of 1910 shows that about half of American families own their own homes and half rent; and that of those owning homes, about half own clear of mortgage and half own subject of mortgage. Whether or not to own a home is therefore a question to which experience has led about half the people to say yes and half to say no.

In the 1920 census so far compiled for 68 cities, home

ownership varies from 12.7 percent in New York City and from 17 to 20 per cent in Cambridge, Boston, Fall River, Jersey City, Newark, and Hartford, which were the cities having the lowest percentage of ownership, up to from 46 to 51 percent for St. Paul, Baltimore, Seattle, Reading, Kansas City, Kansas, Youngstown, Omaha, Toledo, Grand Rapids, and Des Moines, the cities showing the greatest percentages. Half these cities have from 27 percent to 40.9 percent of home ownership and the median percentage is 34.7 percent. It is noteworthy that in 42 of the 68 cities the percentage of home ownership has increased in 1920 over 1910.

The largest conditions affecting ownership are doubtless: (1.) Rural life where home-ownership is determined by the broader question of farm ownership versus tenancy. (2.) Factory industry and modern commerce favor renting since the renter as a foot-loose person has often had an advantage in bargaining power. The economic advantage of permanent residence is however now being discerned by employers and employees alike. (3.) The size of modern cities and the shifting character of their sections make it expensive to buy a house because of high land values and sometimes an uncertain investment to hold it because of shifting land values. In 1910 in cities over 25,000 only 25.7 percent owned their homes. (4.) The size of income may make it very difficult or very easy to own a home; thus in 1901 of 25,440 workingmen's families with incomes up to $1200, only 19 percent owned their homes.

The reasons for owning one's home include: (1.) The anticipated money-saving in ownership as a cheaper method of housing than rental—but this may prove to be a smaller gain than anticipated. The obvious argument that the landlord makes money by renting property to me, therefore, I can make his profit by self-ownership, loses sight of these facts:—that in addition to an interest return his margin on each house is small, perhaps a net 2 to 3 percent at most and often less; that the private person whether building or buying a house will probably not secure so favorable a figure as the operator

who knows values accurately; that the operator can handle property as regards necessary repairs and alteration more economically; and that should a sale be necessary, especially a quick sale, the private person will not usually secure so good a price as will the specialist, and may often sacrifice a good part of value by a forced sale or by holding a home in a part of the community where real estate values are depreciating.

(2.) Buying a house is a good means of saving or accumulation by monthly payments on purchase in lieu of rent. This is in accord with the psychology of successful saving—a definite concrete goal and an obligation requiring periodical saving.

(3.) Owning one's home is considered a secure investment. A house located in a community that is not going backward and in a neighborhood that is appropriate to the type of house concerned and that is not retrogressing, a house always insured against fire and always kept in repair—such a house is a secure investment; and if it is located so that its site value is appreciating it will secure an added value thereby. However, a house even if kept in repair wears out and so gradually depreciates in value, and its value may depreciate more rapidly due to changing styles in house construction or changing neighborhoods, that is, through obsolescence, so that after a few years it could not be sold for a sum approaching its original cost. The owner must take this usually constant fall in value into account, in determining what it actually costs him to own a house.

(4.) Home ownership gives one a permanent place for bringing up one's family with facilities better than those of rented property; it enables one to build or re-build to meet the family's needs; it secures for adults and children alike the experience of the owned home with its continuing associations, its views forward and backward, to an earlier generation possibly, to a later one probably, and not less that community approval which society gives the home owner, the tax payer, the good citizen.

(5.) Home ownership is a wise financial provision for old

age; other investments may fail, but a property suitable to one's needs in old age and clear of encumbrance takes care of a considerable item of living cost, say 15 percent of one's outgoes.[1]

(6.) Finally, there seems to be a fundamental satisfaction in ownership which house ownership gratifies; the desire to possess and control rests on an instinctive basis, related perhaps to the child's instinct to grasp and hold, and the exercise of the "property instinct" as of any instinct is satisfying.

Advantages of rent-paying.—The renter has no obligation beyond his lease, a month or a year ahead; no responsibility for property, repairs, taxes and the like; no necessity of staying in a community because his home is there, which may be an economic advantage; no danger of loss of capital put into a house. If one's neighbors, or local living conditions, or conditions of employment, become undesirable, one can move elsewhere within or outside the town; if one's income increases or decreases one can adjust one's shelter-cost to one's means; if one's family increases or decreases one can similarly take a larger or a smaller house.

Disadvantages of renting.—"One cannot borrow on a bundle of rent receipts"—in other words the renter does not acquire an investment by his life-long housing expenditure. One may have one's rent increased unexpectedly, or may even lose one's leasehold through an unfair landlord. One cannot always secure ordinary repairs as desired—much less alterations to make the house suit one's needs. One may be powerless to secure improvement in faulty common services, unsanitary conditions and the like; in time of house scarcity, one may find himself without a house or subject to over-crowding; "one remains a life-long nomad, and nomads are always barbarians" —one misses the cultural experience of home ownership. One misses the opportunity to practice compulsory saving through the purchase of a house and to secure this most common re-

[1] Taxes of 2 or 3 percent of house value, or 4 to 6 percent of annual income, will still have to be paid, also repairs.

source for meeting periods of unemployment and provision for old age retirement.

The final question whether a home is a wise investment turns on the worth to one of the experiences involved. Mrs. Richards has said that the modern urban family can afford to own "only if the ownership sentiment is worth the risk of losing on half your investment; if you are able to give up all you have lavished on it if duty calls; if you are willing to be bound hand and foot by unsaleable real estate or by sentiment." Yet persons find home ownership under these conditions worth while, and also if wisely managed, a good investment.

Can I afford to own my house? This question can be answered by filling in the following schedule for a given year:

A.	Market value of house and land on Jan. 1st.....	$.....
B.	Rental value at 12% (unless the local standard is lower)	$.....
C.	Market value of house and land on Dec. 31st.....	$.....
D.	Cost of owning house for year Jan. 1st to Dec. 31st:—	
	1. Interest on mortgage, if any, at 6%.....	$.....
	2. Interest value of my money so far invested in home at 6% (since I lose this by home ownership)....	$.....
	3. Taxes for year.....	$.....
	4. Repairs for year (½ of 1% or more).....	$.....
	5. Insurance on house (one year's cost).....	$.....
	6. Depreciation in value of house and land for Jan. 1 to Dec. 31 (A less C). Estimate building depreciation as 1% to 2%.....	$.....
	If property has increased in value, through land appreciation, the excess of C over A should be subtracted from the sum of costs 1 to 5.	
	Total costs for year (D = the sum of items 1 to 5 plus or minus item 6) = ...	$.....

If B exceeds D it is cheaper to own, and the amount measures this year's gain through ownership; if D exceeds B the difference measures the cost of ownership over rental.

When extensive alterations and enlargements are made they should not be considered as "repairs" under D-4 but added to A of the next year.

D-6, Depreciation on the house may be estimated at 1 percent a year on a brick building, and 2 percent on a wooden building. This should be actually set apart in a special sav-

ings fund, and allowed to accumulate with interest. Such a fund at 1 percent a year compounded at 4 percent will accumulate to the value of the house in about 41 years; at 2 percent a year it will similarly accumulate in about 28 years.[1] The annual depreciation charge may well be invested in a local Building Loan stock, where it would accumulate at 6 percent and hence more rapidly.

The depreciation referred to concerns the house alone; the land value should be under annual review—it may be stationary or increasing or even decreasing. The latter condition should arouse suspicion of the investment aspect of the property.

E. My usual annual income is $.....

F. The value of my house (A) $....., is..... times my income (E) $..... [The standard usually suggested is that one's house should not represent more than two times the amount of one's annual income.]

Mortgages.—Mortgages, that is, pledges of real estate to guarantee money loans made to owners of property, make it possible for an owner to buy with a smaller capital or to draw part of his investment while still keeping entire control of the property; hence business men often mortgage their homes to free their capital for business use. There are dangers in this practice, and the house with small or no mortgage is a better reserve for family security.

Mortgaged property is often easier to sell than property that

[1] The following table indicates the rate of depreciation necessary to be charged for varying stated terms of years in order to accumulate the value of a property, if the annual amounts are set aside to accumulate at 4 percent.

To accumulate the total sum in:	The following percent per year must be set aside:
16 years	4.582 percent per year
19 "	3.614 " " "
22 "	2.919 " " "
25 "	2.401 " " "
28 "	2.001 " " "
33 "	1.510 " " "
41 "	1.001 " " "
50 "	0.655 " " "

is clear of mortgage, first because buyers often do not wish to pay the entire purchase price in cash and a mortgage already in existence can be assumed by the new purchaser, and next because the amount of the mortgage may be something of an index as to the value of the property and as to the validity of the title of the property.

In cities more than half of residence property is usually mortgaged; thus in Philadelphia in 1920 70.7 percent of the homes were mortgaged.

First mortgages usually do not run to more than 60 percent of the value of the property; and the census reports that as a rule the greater the value of a house the smaller the proportion of the total value which the mortgage represents. This principle is illustrated by the situation in Philadelphia where in 1920 mortgaged homes valued at less than $2500 carried mortgages representing on the average 59.3 of the market value; while on homes valued from $5000-$7000, the mortgage averaged 35.2 percent of the value; but homes valued at $25,000 or more, were mortgaged for 42.2 percent.

The amortizing mortgage, or one on which regular periodical payments are made until the mortgage is paid off, is becoming common in America. It has the great advantage of being discharged by convenient payments since the person has obligated himself to make periodical curtailment, whereas an ordinary mortgage will be allowed to run for years despite the intention of making payments.

Summary.—Standard housing is essential for standard homes. A house involves rooms for work, for rest, for group social life. The one-family detached house with at least a tenth of an acre of land is the ideal type having great advantages over the row house, the two-family and the multiple types of houses. Housing varies with the income, but standards should be maintained for all families and just as essentially also for the large institution group, for the single person, for the labor camp and for all other groups.

Housing costs take in the form of rent from one-tenth to

one-fourth the annual income, or even more. The owned house is usually valued at about twice the owner's annual income. Rents are at from ten percent of the house value up, and unfair rentals have recently led to court review of rent charges in a few cities. Home ownership while increasingly difficult in growing cities and with the widening of tenancy on farms, is still to be appraised at its traditional worth, as an encouragment to thrift, a protection in old age, and a humanizing asset to both child and adult in the family, and a benefit to good citizenship. Modern conditions, however, make a wise individual decision between renting and owning difficult.

ADDITIONAL REFERENCES

GRAY, GRETA. *House and Home.* Lippincott, 1923.

NATIONAL BOARD OF FIRE UNDERWRITERS. *Dwelling Houses; A code of suggestions for construction and fire protection.* National Board, etc. New York, 1922.

CHAPTER VII

SOCIAL ASPECTS OF HOUSING

In this chapter are presented the more important social aspects of the housing problem. Georges Picot, years ago, stated the principle that "The improvement of dwellings is the best guarantee of civilization." [1] and James Ford of Harvard has explained the reason for it: "It is impossible to create a high civilization in a democracy where a large portion of the population must exert its entire life in struggling against destructive environmental conditions. The essential prerequisite of efficient democracy is a healthful home life with elimination of all the destructive elements now present in our slums and with the presence of constructive elements, sanitation, safety, ventilation, sunlight, space, privacy, beauty." [2]

Factors in housing progress.—Various agencies and conditions having to do with improvements of housing are here mentioned briefly with illustrations of their operation and more extended discussion of certain of them follows later.

1. The ancient art of architecture, as represented both by its professional practitioners and by the schools of architecture, is the most important single agency of housing progress. Schools of architecture commonly give special courses on domestic architecture, and individual architects are from time to time making special contributions. A number of architects of Minneapolis formed the Small House Bureau in 1920 (now extending throughout the country) which furnishes complete plans and advice for building at a cost of $25 or thereabouts, and

[1] Quoted by Gould, E. R. L. *Housing of Working People,* Report of U. S. Department of Labor, 1895, p. 432.

[2] Ford, James. *Fundamentals of Housing Reform,* Annual Report, Smithsonian Institution, 1913, p. 743.

thus brings the services of the professional architect to those who seldom have been able to secure them.

2. The public health movement has drawn attention to housing as one fundamental factor affecting health and has secured remedial action by the health codes that relate to housing and by board of health supervision and inspection of housing. Certain health movements, particularly those against tuberculosis, and for the control of contact diseases as influenza, regard improved housing as one of the most important factors in their campaign.

The sanitary science movement has provided new facts related to housing, for example, the proof that sewer gas is only disagreeable, not directly dangerous to health; and the fact that movement of air is most important for comfort, thus basing the superlative value of the detached house with windows on four sides upon a newly demonstrated scientific fact; it has also provided methods of research applicable to housing tests, for example, tests for dust, smoke, air, water, degree of sunlight, and other housing factors.

3. Investigations of local housing conditions often lay the basis for local action for housing betterment; for example, the New York Tenement House Commission Report of 1900 led to the new tenement house law of 1901. The local housing surveys that have been made in nearly a hundred American communities [1] are largely responsible for the increased knowledge of facts and the national disposition at least to correct housing abuses.

4. Official housing regulation is the most important way of setting better housing standards, whether (a) by a local Board of Health code; (b) a local building code, which in stating standards for building construction is almost sure to affect housing conditions, either favorably or perhaps unfavorably

[1] See De Forest and Veiller, *Tenement House Problem*, 2 vols., 1903 Aronovici, C. *Housing and the Housing Problem*, 1920, Chap. V. Aronovici, C. *The Social Survey*, pp. 80-103; *A Plan for Housing Survey*, California Commission of Immigration and Housing, 1916. Harrison, S. M. *Social Conditions in an American City*, 1920 (Springfield, Ill., Survey), Chap. 6.

as when, for example, the requirement of unnecessary plumbing refinements or an over-thick brick wall makes workingmen's cottages needlessly expensive; or (c) more thorough regulation by a housing law as discussed elsewhere. The Tenement House Department of New York City, the Board of Tenement House Supervision of New Jersey, the Pennsylvania State Board of Health with its Bureau of Housing and its recommended housing ordinance for local adoption, are examples of housing regulation at work.

5. Contributions are being made by housing experts and critical students of housing, the appearance of whom indicates the emergence of a new profession. There should be mentioned especially the contribution of Lawrence Veiller to American housing, not only in his particular field of legal regulation, where he may be said to have created our concept of housing law, but also with regard to all housing problems; and also besides the architects specializing in housing problems, such persons as John J. Murphy, former Tenement House Commissioner of New York, Carol Aronovici, director of many housing surveys, John Ihlder, now of the United States Chamber of Commerce, Professor James Ford of Harvard, and workers in allied fields especially the city planners and landscape architects such as George B. Ford, John Nolen, and others. The Division of Housing Standards of the United States Department of Commerce (1921) is now furnishing nation-wide professional guidance.

6. Housing organizations are effective agents for progress, particularly the National Housing Association with its office and staff in New York ready to render service on call anywhere in the country, and its annual volume of proceedings of the annual convention, *Housing Problems in America*, and its quarterly, *Housing Betterment*, which furnish a remarkably complete world survey of housing progress. There are also state housing associations, as in New Jersey; and many local housing organizations such as The Philadelphia Housing Association, the Better Homes Association of Cincinnati, and the

Tenement House Committee of New York, each of which has its paid secretary.

7. A growing literature of housing in America has appeared. Beginning with Jacob Riis's *How the Other Half Lives* (1892), and including Mr. Veiller's writings and the publications of the National Housing Association, and the numerous surveys referred to, there should also be named: Aronovici's *Housing,* Murphy, Ackerman, and Wood's *The Housing Famine,* Edith Elmer Wood's *The Housing of the Unskilled Wage Earner,* and Knowles' *Industrial Housing.* There are also invaluable government reports on housing, particularly those of the United States Department of Labor and the War Housing authorities, the reports of industrial and other housing companies, and current comment in the *Survey Magazine* (New York), the *Architectural Record, Architectural Forum,* and similar journals and the *Monthly Labor Review* of the United States Bureau of Labor Statistics. But there is greatly needed at present a comprehensive and authoritative statement of the whole field.

8. City planning and the districting and zoning of cities, as discussed elsewhere, are now working powerfully for better housing.

9. The improvement of transportation helps housing, particularly radiating trolley and bus lines that carry the workers to areas that make possible detached houses and adequate ground area. High transportation cost on building materials often contributes to the stagnation in building, and lower freight rates speed up building.

10. The new interest of industry in the housing of workers which regards the adequate housing of their families to be as pertinent to production as is factory construction itself, expresses itself in the transfer of factories to suburbs, and in the building of new sections in towns for housing employees, or indeed building whole towns as Gary.[1] The satellite town,

[1] Magnusson, Leifur. *Housing by Employers in the United States.* U. S. Bureau of Labor Statistics, Bul. No. 263, Washington, 1920.

Knowles, Morris. *Industrial Housing with discussion of accompanying ac-*

self-contained as regards industries, housing and retail markets, with open country between it and other towns is the ideal. The fight of the social reformer against slums, tenement work, and sweated industry therein, is thus reinforced by wise industrial leaders who regard good housing as a direct road to increased production.

11. Increased community services are being brought to the house: pure water, municipal sewers, and garbage disposal in cities, and electric service along leading country roads and district heating plants in cities. Groups of detached houses are being given common services of heat, hot water, care of walks, lawns, waste disposal, etc. The first step toward housing progress in many cities to-day would be to outlaw the privy and require modern indoor toilets. The bath tub which seems no where to be a legal requirement in housing laws, keeps pace with the sanitary toilet, the American family demanding it as a part of its standard house.

12. Rural housing is improving as regards running water and water-borne waste disposal provided by private water plants, and these are being pushed aggressively by the manufacturing companies concerned—a good illustration of modern industry directly improving living conditions. Improved rural house plans, beautification of home grounds, rural club houses, and other items of rural housing betterment are being promoted. Several states have circulated improved housing plans for farm houses.

13. Model houses to some extent stimulate both the supply of, and the demand for, similar housing, and are found both in multiple and detached types of dwellings. The City and Suburban Homes Co., of New York, organized in 1896, has now six model tenements including two for colored people, a "Junior League Hotel" for women, and suburban detached housing property, representing all together a property of nearly eight millions and housing 14,000 people. This company by skilful

tivities such as Town Planning, Street Systems, Utility Services, and related Engineering and Construction Features. New York, McGraw-Hill, 1920.

management provides attractive housing at a relatively low price; repairs are kept up, a depreciation fund of 1½ percent a year is set aside, and dividends of 4½ percent (limit 5 percent) have been paid.

14. Community housing companies have been organized in many cities, during and since the war, by local business men to build houses for employees and other wage-earners or to help finance such construction; a survey by the United States Chamber of Commerce revealed 57 local housing and financing companies, which, to the end of 1920, had built 5714 houses and made plans for many more. A new example of community planning in America on a more elaborate scale is Winton Village, a forty-five acre development at Rochester, with fifty-five individual houses together with certain community services including a club-house with a central kitchen, dining rooms, and a cooked food service which will send meals into the private home if desired. Other projected features, which it is hoped may be developed, include a nursery, kindergarten for the children, special laundry arrangements and a central heating plant.

15. Instruction regarding social and economic problems of housing and regarding city planning, is given in a number of higher educational institutions. Courses on the house plan are given in most large college departments of home economics. Direct social and educational work in terms of housing have been carried on in New York, Philadelphia, Yonkers, Los Angeles and Cincinnati, and doubtless other cities. The Better Housing League of Cincinnati has a model flat as its center of instruction, with expert leadership and visiting housekeeping workers who help tenants, cooperate with owners, and with the health department and achieve remarkable results in improving conditions. The best municipal housing inspection will approach the same educational standards, rather than being simply coercive. Popular education in housing values for tenants has here and there found its way into the public schools as in home economics classes. City plan commissions

have used the schools as well as lectures, exhibits and public discussions in order to inform the public. Home building and home ownership have been promoted in several communities by a school study of plans and the making of house models.

16. Local organizations of rent-payers, which became common during the recent rise in rents, might, under good leadership, become a permanent factor of great importance in city housing. The organization of the weaker element in considering the problems of landlord-tenant, would secure progress, just as it has in the relations of labor with capital.

17. Progress is being sought in controlling the fire loss of dwellings (which averaged an insured loss of $50,800,000 on frame buildings and $4,814,000 on brick per year for the years 1915-18), by increase in fire-resistive construction, and popular education for fire prevention to which in the schools of certain states a day a year is devoted.[1]

18. The organized real estate interests are often influential for housing. In the development of new suburbs, they do constructive work; their function, in part, is to produce a constant supply of new housing in anticipation of demand; they carry the responsibility for real estate management and relations with tenants; their attitude in actively supporting the zoning movement as soon as they understood it, is indicative of the help they can give to progressive movements. If one finds fault with their super-speculative operations, with buying and selling that simply absorb into private hands "the unearned increment," one must remember too the service rendered by the realtor whose profession is the development and handling of housing property, and any local or national reform should secure their cooperation. The suggestion of municipal ownership of land in order to check speculation has not yet received support in America, although a similar control may be effected in new industrial towns by corporations concerned.[2]

[1] *Dwelling Houses, A Code of Suggestions for Construction and Fire Protection.* National Board of Fire Underwriters, New York, 1922.

[2] See also, Purdy, Lawson. "Own Your Own Town." *Housing Problems in America.* 1918, p. 273.

19. The importance of enlightened property management that seeks the tenant's welfare as well as the owner's advantage is being recognized. Octavia Hill established standards for social welfare work through property management [1] which have been copied in Philadelphia [2] and elsewhere. Rent collecting is a new vocation for women.[3] The limited dividend housing companies illustrate these principles. Industrial housing is now often conducted in a similar way, and the same spirit is reaching into commercial housing. A recommendation of the Women's Section of the English Garden Cities and Town Planning Association is that working-class property be put in the hands of persons trained in estate management and in social science; that the requirements on certain properties call for women's special experience; that it is advisable for local authorities to appoint women in the housing department; and that improved standards of management are necessary. Where cooperative housing associations handle property as in Europe, enlightened management may result; and in Holland the building associations often employ women housing inspectors or teachers.

20. The waste in unstandardized house construction has recently been pointed out and experiments are making in standardizing dimensions and structural units. Just as the Japanese house has for centuries been built in multiples of the mat (3 x 6 feet), so one architect has suggested the idea of multiples of the 16-inch unit which carpenters long have used,[4] which applied in quantity production would achieve a saving of 25 percent or more for lumber cost. Standardization of tile, slate and other materials is under way, saving duplication of effort, overcoming seasonal unemployment, permitting quantity operation at factory and in building erection, reducing main-

[1] Hill, Octavia. *Homes of the London Poor.* Macmillan, London, 1875. *House Property and Management.* London, Allen and Unwin, 1921.

[2] *Housing Progress,* Octavia Hill Association, Philadelphia.

[3] Perkins, A. F. *Vocations for Trained Woman other than Teaching,* pp. 49, 55.

[4] Tappan, Robt. "Factory Production Applied to Housing Problem," *Housing Problems in America.* 1920, p. 56.

tenance and facilitating repairs. English government housing standardized structural parts of houses, and of equipment as plumbing, ranges, etc. Mr. Hoover has stated the principle succinctly that standardization would produce "great savings in manufacture, distribution and installation and there need be no sacrifice of styles." Parallel to this idea is the standardization and simplication of plumbing codes, and building codes.

21. A reorganization of industry and living conditions whereby a man's industrial work would be done at home, and his home would be in a house set in an open area of an acre more or less so that small farming might be carried on as well as industrial employment has often been urged as a reform.[1] Garden cities and industrial towns in which workmen while still employed in factories live in houses with adequate open space about them for gardening and the like, with additional garden allotments available for those who desire more space, and with belts of open common land between adjoining towns to give permanent access to the open country is a modern expression of this ideal. There are economies in congregate production in factories which will doubtless maintain the factory system, but the advantages of more open spacing of houses are now being appreciated and sought.

22. High real estate taxation is a source of high housing costs; and relief is being proposed by putting heavier taxes upon land than upon the houses constructed upon it, and by finding other sources for government revenue so as to reduce pressure on the real estate tax.

23. Monopoly agreements among building material firms, among builders, and among building-labor groups, increase costs of building inordinately. The remedy is being sought partly in legal action and partly by spreading the knowledge that where labor makes costs increase, labor will bear that cost itself in higher rents and poorer accommodations; and with

[1] Kropotkin, P. A. *Fields, Factories, and Workshops, or Industry combined with agriculture and brain work with manual work,* 1898, is the classic statement on the subject.

those of greater economic power, who monopolize life's necessities, it is again a matter of emphasizing better business ethics, as well as the penalties of the law.

Housing legislation.—The legal basis of housing legislation is the police power of the individual states, that is, their power to enact laws tending to promote public health, safety, or welfare. Professor Ernst Freund, who is an authority on the police power, has stated the following propositions as desirable principles of housing legislation:[1]

1. The standard of housing legislation should be the accepted standard of the American community, except in so far as that standard falls short of essential sanitary and safety requirements. The law may legitimately resist the introduction of inferior foreign standards. The police power is a corrective, and not a formative power. It is beyond the power of the state to impose superior standards that are not justified by economic or social conditions.

2. Housing legislation should respect vested rights. The expense of required improvements should be proportionate to the value of the property. It might well be recognized as a normal principle that expenditure made upon the faith of an existing law should at least be allowed to be amortized by having its benefit a sufficient length of time.

3. Housing legislation should maintain a due regard for personal rights. Sanitary requirements will still have to be enforced, but the right of the tenant is a countervailing interest of a higher order than the right of the landlord.

4. The constitutional principle of equality demands that there should be no unnecessary discrimination and yet every proper differentiation. Like conditions should be subject to like requirements and restraints; yet mechanical uniformity may create gross inequalities.

5. A housing law should be a state law (not a city ordinance) not merely to ensure the rule of equality, but because certain

[1] "Housing and the Police Power," E. Freund, in *Housing Problems in America*, 1915, p. 27.

desirable provisions are beyond the usual ordinance power, and because in small cities it may be difficult to have housing codes drawn with sufficient expert assistance.

Housing is a subject of state, not federal legislation, or of city ordinance adopted under state authorization. The earlier state laws were generally based on the New York Tenement Law of 1901, or Veiller's Model Tenement House Law [1] which set standards for multiple dwellings only, and did not concern one-family or two-family houses. These earlier laws included New Jersey (1904), Pennsylvania (1895), Connecticut (1905), Boston (1907), Baltimore (1908), San Francisco (1907), New Orleans (1906), Los Angeles (1907), and certain other cities;[2] and also these state laws based particularly on Veiller's Model Tenement House Law—Kentucky (1910), Massachusetts (for towns 1912, and for cities 1913), Pennsylvania (1913), Indiana (1913 and 1917), and California (1917).

The recent state laws have been based largely on Veiller's Model Housing Law, which proposes legal standards for the construction and maintenance of all dwellings, whether occupied by one family or by more. This question, of whether legal standards are to apply to tenements only or to all dwellings, is fundamental. The principle seems now generally accepted that housing laws must be all-inclusive, for the recent laws of Michigan (1917), Minnesota (1917—applicable only to Minneapolis), and Iowa (1919), concern all buildings in which people dwell, and similarly broad laws have been proposed in Illinois, Pennsylvania, Rhode Island and Massachusetts (for Boston) while ten cities had by 1920 adopted local ordinances of similar scope.[3]

The Model Housing Law which is designed as a basis in drafting state laws and city ordinances, contains six divisions: I. General Provisions; II. Dwellings hereafter erected,

[1] Veiller, Lawrence. *A Model Tenement House Law,* Sage Foundation, 1910. *A Model Housing Law,* 1914, 1920.

[2] *Tenement House Legislation, State and Local.* F. H. MacGregor, Wisconsin Free Library Commission, Madison, 1909, pp. 10-16.

[3] Veiller, L. *Model Housing Law,* Revised Edition, 1920, pp. v-vi.

as regards (1) light and ventilation, (2) sanitation, and (3) fire protection; III. Alterations in old dwellings when made by owner; IV. Maintenance of all dwellings, old and new; V. Improvements required by the law in old dwellings; VI. Requirements and remedies—or the enforcement of the law.

Article I of the Model Housing Law—General Provisions, defines the scope of the law, and various terms used in it, such as dwelling, family, court, yard, etc. The law is so drawn as to cover all dwellings: (1) the "private dwelling" of one family alone; (2) the "two-family dwelling" occupied by two families alone, one above the other (double houses divided by a vertical wall are considered two private houses); and (3) multiple dwellings—the latter including all dwellings other than the private and two-family dwelling, and classified as to: (A) Those "occupied more or less permanently for residence purposes by several families, and in which the rooms are occupied in apartments, suites or groups" (i.e., flats, apartments, tenements), and (B) Those "occupied as a rule transiently as the more or less temporary abiding places of individuals who are lodged, with or without meals, and in which as a rule the rooms are occupied singly" (i.e., hotels, lodging houses, boarding houses, lodgings, clubs, convents, asylums, hospitals, jails and all other dwellings similarly occupied).

It is suggested as a matter of policy that the law apply at first to all places with a population of 10,000 or more, then later the law can be extended to places of less than 10,000. With places over 10,000 the law may wisely be extended to apply to all territory within two miles of the city boundaries thus heading off future slums.

Article II of the Model Housing Law, sets standards for "dwellings hereafter erected," that is, for all new construction.

Light and ventilation is safeguarded for new dwellings as follows:

1. The percentage of the area of the lot to be occupied by the new dwelling is limited to a maximum of 90 percent of a corner lot surrounded by three streets; 85 percent of other

corner lots; 70 percent of an interior (non-corner) lot, if it is not over 60 feet deep, and 65 percent for lots from 60 to 105 feet deep; this percentage diminishes to 40 percent for interior lots over 205 feet deep.

2. The height of the dwelling is not to exceed the width of the widest street on which the dwelling abuts, nor in any case 80 feet in height.

3. There must be a rear yard extending across the entire width of the lot open to the sky, and of a required depth varying with the height of the dwelling—the depth of the rear yard to be 20 percent of the depth of the lot for a three-story and 25 percent for a four-story dwelling, and shall thus increase 5 percent for each story; the rear yard in any case to be 10 feet deep.

4. Side yards, if present, must be of a minimum width but they may be omitted. A side yard for a private dwelling must be at least six feet wide for a one-story house; eight feet wide for a one and a half or two story house, and increased two feet in width for each additional story or part story. A side yard for two-family and multiple dwellings must be eight feet wide for a one-story house, ten feet for a two-story house, and similarly increased for higher buildings, and must also be increased in width for such dwellings longer than 60 feet; at the rate of two feet of added width for every ten feet of length over 60 feet. In all cases the measurement is to be from the side of the dwelling to any adjoining building, and where the adjoining premises are unbuilt upon, the full space for the side yard must be left on the same lot with the dwelling, unless a permanent easement is secured from the adjoining property owner to leave unbuilt a sufficient portion of his lot to give the required space between buildings. But side yards may be omitted, and dwellings built in rows adjacent to each other with no space between, and any single dwelling, may be built up to the side line, provided the light and ventilation required is not obtained from windows located at such lot line or on any side yard less than the size required by this section.

5. The size of all courts must be proportionate to the height of the court. The minimum width and the minimum length must each be not less than one-third of the height. Further the length of an inner court must never be less than twice this minimum width and never greater than four times its width (except in the case of side yards). Courts must be open at the top; and every inner court must have two or more air intakes at the bottom, not less than three by seven feet.

6. Buildings may be placed on the same lot with a dwelling only in case standard open spaces are left between them; but a one-story private garage may be built at the rear of a lot within 10 feet of the rear of the dwelling or attached as an extension.

7. One window, at least, and preferably two windows, shall be provided in every room. The windows shall open directly upon the street, or upon a standard yard or court. There shall be ample provision for through or cross ventilation by transoms, doors, or windows. Also, the total window area shall be at least one-seventh of the floor area of the room; one window to be not less than 12 square feet in area, and in multiple dwellings the top of at least one window shall be at least 7½ feet above the floor.

8. Every room (except toilets and bath rooms) shall contain at least 90 square feet of floor area. No room shall be in any part less than seven feet wide; except that kitchenettes and cells of jails may contain but 50 square feet, and be not less than 5 feet wide. In multiple dwellings for families, there shall be at least one room of not less than 150 square feet. No room in a private dwelling or two-family dwelling shall be less than eight feet high (except attic rooms), and no room in a multiple dwelling less than nine feet high. Alcove rooms must have an area of at least 90 square feet, and shall be separately lighted and ventilated as for rooms. Access to every living room, to every bed-room, and to at least one water-closet compartment, shall be had without passing through a bedroom. Every water closet compartment and bath room shall

have at least one window opening directly on the street or a standard yard or court, the aggregate window area to be not less than six square feet. Public halls and stairways in multiple dwellings are to be lighted by windows and skylights.

Provision for sanitation: In all dwellings hereafter erected, no cellar rooms may be occupied for living purposes; basement rooms, that is, rooms partly underground, but with at least one-half their height above ground, may not be occupied unless light, ventilated, dry and fit for habitation; every dwelling shall have an excavated space at least 3 feet deep under the entire lowest story, or shall be elevated so that there will be a clear air space of at least 2 feet between the top of the ground and the bottom of the floor, such space to be enclosed and ventilated. All walls below ground level and also the cellar or lowest floor shall be damp proof and water-proof; all cellars and basements shall be properly lighted and ventilated; courts and yards shall be graded and drained.

Water supply and toilets: A sink or wash bowl with running water, exclusive of any sink in cellar, shall be placed in every dwelling hereafter constructed, when water mains are accessible. In two-family dwellings, and in multiple dwellings for families, there shall be such a sink in each apartment or group of rooms. Where water mains are accessible, there shall be a separate water-closet in every dwelling, and in two-family dwellings and multiple dwellings for families, a separate water-closet within each apartment or group of rooms. No water-closet fixture shall be enclosed; no water-closet shall be placed out of doors; none shall be placed in a cellar without a written permit from the health officer; every water-closet compartment shall have proper means of lighting at night; every water-closet compartment shall have a window opening upon the street or standard yard or court.

Sewer connection: No multiple dwelling for families shall be erected, unless there is city water and public sewer in the street. No cess-pool, vault or similar method shall be used in connection with any dwelling, where connection with a public

sewer is practicable. Restriction against erection of dwellings, until sewer connections are available, is not regarded as feasible at present for private dwellings and two-family dwellings.

Fire protection is provided by requiring that:

1. All dwellings hereafter erected over three stories in height are to be "fire resistive."

2. All multiple dwellings, over one story high, hereafter erected, are to have two independent ways of egress extending from the ground floor to the roof, located remote from each other, one to be a flight of stairs meeting certain standards; and in multiple dwellings for families, the other to be directly accessible to each apartment or group of rooms without having to pass through the first way of egress; the second way of egress to be either an outside balcony, fire escape, or an additional flight of stairs (inside or outside) or a fire tower. Every flat-roof multiple dwelling over one story high is to have a scuttle or bulkhead in the roof, with a stairway leading to it.

3. In multiple dwellings over two stories high or occupied by more than two families on any floor above the entrance story, the stair halls are to be fire resistive throughout, and to be enclosed with brick or other fire-resistive walls. The doors opening from the stair hall are to be fire-resistive and self-closing, and there is to be no transom or sash or similar opening from the stair hall to any other part of the house; and no inside stairs between the cellar or other lowest story and the floor next above.

4. Dumb-waiters and elevators in multiple dwellings are to be enclosed in fire-resistive shafts, with fire-resistive doors at all openings. Dumb-waiter doors are to be self-closing. No elevator is to be located in the well-hole of stairs.

5. No wooden multiple dwelling for families is to be hereafter erected, and no wooden building shall be altered to such use, and no wooden multiple dwelling of type B for transient individuals is to be erected exceeding two and a half stories in height.

Article III of the Model Housing Law—Alterations, states

the provisions which must be observed when an owner proposes to alter an existing dwelling. It concerns areas occupied, heights, yards, courts, additional rooms, lighting and ventilation, water closets, fire protection, etc.

Article IV of the Model Housing Law—Maintenance, states the provisions which an owner must observe with regard to dwelling-houses, new or old. It concerns: lighting of public halls by night and day as the health officer may require; provision of at least one water-closet for every two apartments for families (the requirement for new construction is a water-closet in each apartment); no cellar in any building constructed prior to the housing law is to be used for living, and no basement in such a building to be so used without a health permit; repair of dwelling; sink and water supply in dwellings exclusive of a cellar sink—at least one to be supplied on each floor of multiple dwellings, accessible without passing through any other apartment; keeping dwellings clean; receptacles for garbage; exclusion of animals from dwellings and lots, of rags and junk storage, of combustible materials; resident janitor in multiple dwellings to be provided, if health officer requires; over-crowding, which may be reduced on order of health officer; power of health officer to supervise or prohibit letting of lodgings in multiple dwellings, or if found necessary, in private dwellings and two-family houses; his power to order vacated dwellings that are infected or uninhabitable; his power to order repairs, improvements, etc., when "in a condition or in effect dangerous or detrimental to life or health" and if necessary to execute such order through his agents; maintenance of fire egresses.

Article V of the Model Housing Law—Improvements, concerns changes in old buildings made obligatory by the housing law. It includes: cutting windows into dark rooms in any dwelling; placing windows in public halls and stairs of multiple dwellings; removing wood work about toilet fixtures; whenever public water becomes accessible, the removal of all privy vaults, cess-pools, etc., and replacement by individual water-closets inside buildings (this applying to all buildings, com-

mercial as well as dwellings); concreting cellar floors; providing two ways of fire egress in multiple dwellings over one story high.

Article VI of the Model Housing Law—Requirements and remedies, or the methods of administering the housing law, includes: issuance of permits to begin building only after plans are approved by health officer, and his certificate of compliance is necessary before occupancy—prior occupancy is illegal and no rent is collectible; the penalties for violation of law are stated; the owners' name and that of agents if any, must be filed with the health officer; the health officer is to enforce housing law except those sections dealing with fire protection and means of egress; health officer is to inspect multiple dwellings at least once a year, and has power to inspect all dwellings; he has right of entry for self and those authorized by him.

City planning and housing.—City planning is "the intelligent control and guidance of the physical conformation, growth and alteration of cities, towns or parts thereof considered in their entirety; or the organization of the physical city, town, or district to fit it to its complex use." [1] City planning in its whole scope concerns the home, for the community is the larger environment of family life just as the house and grounds are its immediate environment. The city planner usually includes housing recommendations as part of his responsibility. As Nettlefold says, city planning encourages cooperation between all concerned in order to provide town populations with the light and space necessary to health.

Among other matters of concern to the home of which city planning treats, are: the size of lots and blocks; plans for parks and open spaces; street plans, thoroughfares, minor streets, street widths, alleys, etc.; local transportation systems, present and future; railroad terminals, waterways and water fronts; public and semi-public buildings; the zoning or districting of the city (see below).

[1] John Nolen. *New Ideals in the Planning of Cities, Towns and Villages.* 1919, p. 25.

Planning of new towns or cities would be relatively easy but even in old cities there can be flexibility regarding some of these matters, especially as changes take place in old sections, and there can be absolute control of the city's expansion into new sections.

The size of the city, it is beginning to be realized, is a controllable fact, since new industrial towns and industrial suburbs can be developed in which good living conditions including requirements for detached houses are provided.

By locating such suburbs far enough from a metropolitan center so as to leave open country between and by providing for the permanent maintenance of a belt of open country about the new suburb, and further by guarding against congestion within the suburb by zoning or districting plans as outlined below, it is possible to guarantee good living conditions indefinitely. It is therefore possible to control housing so as to practically set a limit to the number of people who are to live in a given area.

The American desirous of promoting better housing in his community will best work for the planning of his whole community and consider housing in relation thereto, just as England in its great house building program included as one item the requirement that every local government must provide for a comprehensive town planning project before 1926. Several American states have permissive legislation which authorizes local municipal governments to undertake city planning, and in November 1920 there were 148 American cities in which plan commissions were at work.[1]

Zoning and districting laws provide that cities may establish districts in which certain building restrictions are adopted in order to improve living conditions and protect real

[1] National Conference on City Planning. Annual Proceedings 1909—; quarterly publication *The City Plan* (to 1919); pamphlets.

Municipal Accomplishment in City Planning, Nat. Conference on City Planning, Boston, 1920.

City Planning. National Municipal League, 1916.

Bird, C. S., Jr. *Town Planning for Small Communities.*

The American City (Monthly), New York.

estate values. Three kinds of districts are recognized: (1) height districts, in which buildings are limited to certain heights in the different districts or zones; (2) use districts, in which one zone may be set aside for business and another for residence (and, if desired according to a recent Ohio decision, one zone for detached houses and one for apartments) and also one zone for retail business, another for manufacturing, another for nuisance businesses, etc.; and (3) area districts, in which the proportional area to be left vacant for yards, courts and other open spaces may, for example, vary from 10 to 70 percent of the lot. This legislation is of vital interest to the home, since zoning tends to give better standards for open spaces and heights of building and hence protects light and air, and particularly safeguards residence districts against the encroachment of business and if further court decisons agree may protect detached residence districts against the apartment. One of its important aims is to stabilize real estate values, and this is as important for the private home owner as for any one.

In New York City, a city board has authority to increase or to decrease the restrictions. In the first years, there were many petitions for reducing the restrictions, but recently two-thirds of the petitions have been for increasing the restrictions. New York's experience shows that zoning has reestablished values of districts that were depreciating owing to the encroachment of garages and other business buildings into residence districts, and the real estate interests are now the strongest supporters of zoning.

Where districts are either directly set apart for detached dwellings or where in effect this is achieved by the requirement that a large part of each lot must be left unoccupied by the building, a great safeguard is thrown around future housing development. Zoning laws permitting cities to establish zoning or districting plans exist in California, Indiana, Illinois, Massachusetts, Michigan, New Jersey, New York, Ohio, Oregon, Virginia and Wisconsin; and leading cities in several other states

are also authorized to adopt zoning plans.[1] The general principles underlying zoning were approved by the United States Supreme Court in 1915. Zoning is of course but one feature of modern city planning, but it is the one feature which should have immediate attention in every city, large or small, and then other details of the city plan should be developed.

"A dwelling house policy is essentially a land policy," said a speaker before the National Housing Association. "We need a load line for the land just as we have a load line for ships beyond which the owners must not go in loading the vessels and just as we have established load lines for women and children in industry." If a limitation has been put on the use of land by which it cannot be used for some great building then the site will not have a great value attached to it such as will necessitate the great building.

City planning and zoning by distributing the population of a city tend to overcome the old abuse that "the poor often live on expensive land and the rich on cheap land"; they check land-sweating by landlords who own the center of towns, and bring about uses of land that are more just for all land-owners as well as create better living conditions for those occupying the land.

Ideal housing requirements.—The United States in its industrial war housing projects, covering two hundred millions worth of construction, adopted a set of standards higher in some respects than are now found in law. They were drafted by Mr. Veiller in consultation with architects and housing experts.[2] Some of their principles as given below point the way to future housing progress. It may be impossible to enact

[1] McBain, H. L. *American City Progress and the Law.* 1917. Chap. IV. "City Planning—Building Heights and Zoning."

Veiller, L. *Model Housing Law 1920.* pp. 380-1 for New York *Zoning Enabling Act.*

Zoning pamphlets of National Municipal League, New York.

A Zoning Primer; A Standard State Zoning Enabling Act, U. S. Department of Commerce, Washington.

[2] See *Architectural Record,* April, 1918; reprinted, pp. 344-372. Veiller, L. *Model Housing Law,* 1920.

them at once into housing laws, but an educated public opinion would doubtless demand their adoption.

Tenements and apartments were considered generally undesirable and they were to be accepted in the government's housing only in cities where, because of high land values, it was clearly demonstrated that single and two-family houses could not be economically provided or where there was insistent local demand for this type of multiple dwelling. Single houses in rows or multiple houses were not to be more than two rooms deep, the court as generally known was outlawed even in tenement houses, and a large interior park was required.

Adequate space, 20 feet if possible, 16 feet as minimum, must be left between adjacent dwellings as side yards, otherwise construction must be in group or row houses with no side yards. There must be 50 feet clear between the rear of houses, and a rear yard on the lot where the house stands of a depth no less than the height of the buildings, with a minimum of 20 feet. Set backs or front yards were called for as desirable where practicable, and the minimum distance from the front of one house to another across the street was to be 50 feet.

There was absolute prohibition of living quarters in cellars or basements. No alleys were permitted, but minor streets 12 feet wide and properly paved, curbed, drained and lighted might give access to the rear of houses. The standards also included certain minor but significant requirements; a clothes closet for every bedroom; halls, stairs and doors that permit easy moving of furniture; no winding stairs; bedroom plans that permit beds to be free-standing and not necessarily located in a corner or with the side against a wall; sinks and wash tubs to be placed 36 inches above floor.

In reviewing these war-housing standards one will wish they could be introduced into our state housing laws, along with the other standards set by the Model Housing Law.

The tenement can today be partly held in check by zoning laws; the adequate side yard for the detached house will come as the standard lot in new additions to cities is made 40 to 50

feet wide, instead of the common 20 or 25 feet width which leaves only narrow slits between adjacent houses. Minor streets instead of alleys and the suitable width of streets are matters of city planning. Veiller mentions shallower lots as a desideratum as they will lead inevitably to building dwellings of all kinds, whether single or multiple dwellings, of the two-room deep type without courts, and with one set of rooms opening on the street, and one on a park-like open space in the interior of the block as wide as a street—and this requirement would be the death-knell to apartment construction with courts and shafts.[1] Shallow lots are similarly appropriate for row construction of one-family houses, and for detached houses if one is willing to give up the large rear yard.

Land subdivision.—Our narrow city lots, of a width of 20 or 25 feet and a depth of 100 to 200 feet, are responsible in part for the tendency toward row construction of single houses, and the more undesirable types of apartment houses with courts. Lots of 40 to 50 feet width are better both for detached and for multiple houses, and the best multiple house planning can be done on still larger tracts. It would be a step forward if the 40 to 50 feet lot width was adopted in all new city divisions. The only exception is for the small row-house for families of small income, which can be built on a lot 15 or 16 feet wide. But the row-house should be accepted, in the author's opinion, only as an undesired compromise with high land value that was not headed off by earlier city planning.[2]

Akron has recently adopted the 45-foot lot for new sections. Narrow lots are in part dictated by certain profit-seeking influences since the narrower the lot, the more units there are

[1] See Veiller, L. *Model Housing Law,* 1920, pp. 337-9, where this authority says such a change to shallow lots would make possible an "ideal housing law" with buildings not more than 2 rooms deep and no courts.

[2] In industrial village development, where the size of streets, of lot width and depths can be adjusted, lots 15 feet wide for row houses, 25 to 30 feet wide for each unit of a semi-detached house, and 40 to 50 feet wide for detached dwellings and all lots to have a minimum depth of 80 to 100 feet are recommended by John Nolen, in his "Essential Principles of Industrial Village Development," *Architectural Forum,* April, 1918.

to sell and hence profit for the operator; in part, narrow lots are dictated by the desire to keep the lot price down since the narrower the frontage, the smaller the lot's share of cost of street improvements.

Raw land cost is rarely more than one-third of the lot price, another third being represented by street improvements, and the other third by costs of handling and profits. Costs of improvement were formerly figured at $1 to $10 per front foot —$1 giving a sidewalk and passable road; $5 a sewer, and narrow macadam road and curb; and $10 a thoroughly high class suburban development. As the scale of improvements increases, this is evidently a strong influence for higher land cost and for narrower lots. "The improvements that produce high land values are enemies of the dwelling type of occupancy," rightly declares B. J. Newman, formerly of the Philadelphia Housing Association.

Mr. Nolan quotes as a typical case the following distribution of areas in an industrial village (Loveland Farms, Youngstown): 73 percent to lots, 21.8 percent to streets, and 5.2 percent to public and semi-public properties.

The English government's housing standard of not over 12 families to the acre in congested construction, and 8 families in suburban areas means approximately an area 35 x 100 feet in the one case and 50 x 100 in the other.

Sufficient area should be had for lawn, flowers, garden and the children's activities. The objection that lower income people will not use their ground space intelligently should not control; educational influences can solve this problem and lead people to use their yards intelligently just as education can improve the foods placed on their tables. Both are essentials of reasonable American standards.

Cooperation and housing.—Cooperation may aid housing in various ways—

1. The building loan associations are a well-known method of co-operative banking to provide loans for buying lots or building houses (Chapter IV).

2. Cooperatively owned apartment houses have been operated on the Rochdale principles of cooperation. A Finnish group of cooperators in Brooklyn has erected two such houses,[1] and the Beekman Cooperative Company[2] composed of 40 self-supporting women in New York bought several old houses and altered them into apartment houses, thereby securing very attractive as well as reasonably priced accommodations.

Cooperative companies of apartment tenants have, in various cities, bought out owners during the recent high rent period, under various business agreements often promoted by the real-estate brokers themselves. In some cases the operations were carried out upon an inflated value and unsuspecting persons were deceived. In one case, rentals were raised from $35 to $77, then the property was sold to a cooperative tenants' company. In order to safeguard investors, the Massachusetts Commission on the Necessities of Life has made the important recommendation that all cooperative housing companies should be under the inspection of the State Banking Department, as the Building and Loan Associations are, since these new companies are in effect savings organizations.

New apartments are also now being sold to tenants. In one New York plan the tenants form a stock company to hold the property, which in turn contracts with the original real estate company to operate the property for a term of years. The tenants, in addition to an original payment of $2000 per apartment, pay $100 to $150 a month for a period of six years, after which the undertaking is paid up, except for an underlying mortgage. Thereafter a smaller monthly payment of $40 to $60 will pay carrying charges.[3] The tenant pays rent to his company as any outside tenant would, but receives a dividend on his stock. The tenant-owner can surrender his apartment at the end of any year and the company will then lease the

[1] *Cooperative Housing*, Cooperative League of America, New York. Cooperation, New York State Department of Farms and Markets.

[2] Walburn, Nancy W. A. "Home Ownership Experiment," *Survey*, Oct. 22, 1921. Vol. 47, p. 115.

[3] MacDougall, E. A. *Housing Problems in America*, Vol. 8, (1920).

apartment. The tenant can sell his stock, but the sale of the stock does not carry the right to occupy an apartment as stock ownership and leasing are separate relationships and any lessee must conform to standards of tenancy set. The real estate corporation makes a lease with the cooperative owners to manage the property for ten years for the usual 5 percent of rentals.

3. Cooperative cottage companies are still to be demonstrated in America, although the first experiment is under way in Wisconsin. In this plan the association buys a tract of land and subdivides it and erects cottages for its members, securing initial capital by subscription and perhaps, from the government at a low rate; the tenants pay in by the month until they own shares equal to the value of their house and their share of the general costs of the undertaking. The cooperator has a double relationship of renter and stock holder, paying in rent to the company as though he were an ordinary tenant, and receiving interest on his stock profits.

A new Wisconsin law provides that three or more adult persons may form a cooperative housing association for the purpose of acquiring land, erecting houses and otherwise improving and developing the same. No house shall be erected the cost of which shall exceed $5000 and adequate ground space for light and air must be provided. No lease may be made except to a stockholder of the corporation, and no tenant shall hold stock beyond the value of premises occupied by him. No dividends shall be declared until a reserve fund equal to two percent of the authorized capital is created, and no dividend shall exceed five percent per annum. Stock shall be both common and preferred, both carrying a voting power, and preferred stock may be subscribed for by the common council of any city and the board of supervisors of any county. As the enterprise develops, this public preferred stock can be retired. Under this Wisconsin law, a cooperative company was formed in 1921 in Milwaukee; the city and county authorities each voting to purchase $50,000 worth of preferred stock in the

corporation; and a development of nearly 200 houses has been started just outside the city limits.

Group ownership of detached houses through the cooperative plan is an advantage since it sets good standards of upkeep, so that deterioration of the neighborhood and economic loss thereby to the individual is avoided. As a method of saving, copartnership ownership has less of risk than individual ownership. The house in which one's money is put is probably of better than average construction. While buying on the installment plan, one is guarded against foreclosure—if one must postpone a payment on one's shares one's equity already paid in guards one against eviction for temporary non-payment of rent; "one owns a share in an estate rather than a separate house." If one finds it advantageous to move, one can turn back the house to the Association and keep the stock or sell it. Finally, the unearned increment or appreciation in land value that will result in such an enterprise is shared in equally by all, since it belongs to the company, not to individual land holders. "Copartnership housing" has behind it 15 years of increasing success in England, where progress has been rapid, partly because a national organization, "Copartnership Tenants Limited," aids local companies by counsel, by investing in their loan shares, by organizing wholesale buying of materials and by other services.[1] It is probable that a central company, established with philanthropic capital, could be similarly effective in America.

Government aid to housing construction.—Foreign governments have directly aided in the construction of houses by such methods as: a requirement that certain financial institutions must loan a part of their funds for housing, or that certain government funds as those of social insurance reserves be so used; special housing loans by the government to non-profit-seeking housing companies, and sometimes to individuals; special tax exemptions on housing; direct government action in buying and clearing slum areas, and rebuilding thereon to

[1] Nettlefold, J. S. *Practical Housing.* London, Unwin, 1910.

sell or rent; municipal purchase of land and its sale to persons desiring to build, or the building of houses thereon by the city itself for sale or rent.[1]

In America direct government loans for building operations are not likely, but some experiments and many proposals have been made. The Massachusetts Homestead Commission, with authority secured through a constitutional amendment, bought land at Lowell and built a number of houses for sale on easy terms, but its plans were interrupted by the war, and the enterprise is now in charge of the State Bureau of Labor. In California the Land Settlement Commission has prepared large farm tracts for settlement by subdividing them into farms, by erecting houses and barns on each farm, which is stocked and seeded by the Commission before its sale, thus giving the new farmer an advantageous start. One feature is the provision of small holdings with cottages built by the state, for sale as permanent homes for farm laborers.

While American States are not likely to go far in establishing loan funds, the government could aid the situation by the important financial proposal of the Calder bill that the Federal government establish a Home Loan system, parallel to the Federal Farm Loan system, which would use local cooperative building and loan associations as local representatives; house mortgages accepted by the local association would be transferred to a Federal Home Loan Bank and used as a basis of selling Home Loan bonds to investors, similar to the Federal Farm Loan bonds. This system would create a new type of investment security, based upon house mortgages and supervised by the government, and it is expected would tap new sources of capital for housing.

Government information service.—Information, at least, can be effectively given through a government bureau. During the war, a federal bureau controlled the war-housing construction financed by the government and it was hoped that

[1] *Government Aid to House Owning and Housing of Working People in Foreign Countries.* U. S. Bureau of Labor Statistics, 1914.

this might be made a permanent housing bureau, but Congress discontinued the service. The Department of Labor has made several authoritative reports on housing, having for many years studied the problems of housing.[1] Congress in 1921 made an appropriation of fifty thousand dollars to the Department of Commerce for the collection and distribution of information on housing, and under this authority Secretary Hoover established a Division of Building and Housing under the Bureau of Standards of the Department of Commerce. Secretary Hoover had prior to the enactment of this appropriation appointed a Committee on Building Codes to study the relation of building materials and of legal building standards to the cost of building, and an advisory committee on Zoning of Cities. We have, therefore, now a national agency for investigation and for distribution of information on housing. Its services will tend to correct such abuses as the following: it is said that an 8-inch brick wall is the standard required for a 2-story house in 28 cities, but certain other cities require a 12-inch wall; for a house 20 x 30 feet, the 12-inch wall costs $500-600 more than the 8-inch wall, and this is an absolutely unnecessary cost or pure waste. The worst feature of these unnecessary requirements is that they make decent housing impossible for many who otherwise might achieve it. The Federal Housing Bureau has already issued authoritative information on zoning and zoning laws, building regulations, home ownership and other subjects.

The New York State Reconstruction Commission made a most important recommendation in 1921 in favor of local housing commissions serving without pay, to study local conditions and act in promoting housing. This system originated in Belgium and has proved successful there and elsewhere.

[1] Gould, E. R. L. *Housing of Working People,* Special Report of U. S. Commissioner of Labor, 1895; and reports on *Government Aid to House Owning* (1914) and *Housing by Employers* (1921). The U. S. Bureau of Mines has bulletins on housing in mining communities; and the Department of Agriculture, bulletins on farm buildings, kitchen conveniences, etc., and also rural community buildings.

It seems likely that local Housing Boards might be organized to advantage, or City Planning Boards already authorized in certain states might take over the housing problem; or local housing interests could be definitely provided for under local Boards of Health. Then with a state housing authority in each State Department of Health or elsewhere, and the national housing information service already established in the Department of Commerce, more rapid progress would be assured.

The housing shortage.—Housing construction was halted everywhere during the war and it has not yet (1923) returned to normal conditions due to the disorganization of the building industry, present high prices for building material and labor and uncertainty as to the future range of prices. Rents were slower to rise than most commodities, and hence high enough rents could not be secured on proposed new construction built out of expensive material with expensive labor to make it a good investment to build. The high cost of coal, of transportation, and of credit were given by the Calder, United States Senate Committee (1920-21) [1] as the chief obstacles to renewed building. Recommendations by the Committee included: a government housing bureau on costs, city planning, building practices, etc., which in effect has been secured by the Department of Commerce; and other recommendations not yet acted upon—a government information service on the coal trade, permission to National banks to make long-term housing loans, a home loan bank system to increase loaning facilities of cooperative building loan associations, exemptions from federal taxation of profits on dwelling houses where such profits are reinvested in dwelling construction, and exemption from taxation of interest on dwelling house loans up to $40,000.

In many states special aid to housing was sought. New York passed a law authorizing municipalities to exempt from taxation for ten years new dwellings completed after April

[1] Reconstruction and Production Hearings before Select Committee, U. S. Senate, 66th Cong., 3rd Session, pursuant to S. Res. 350. Three vols. 1921.

1920 and before a certain date, and this was approved in New York City where it has been effective in stimulating building, and also in a few other cities. Kansas adopted (1920) a constitutional amendment authorizing a state loan fund for loans to persons wishing to buy farms to be lived on and operated by the purchaser. The South Dakota Legislature authorized state loans for home building, not to exceed $4000 in amount; and Massachusetts authorized (1920) towns and cities in the face of a public emergency or "When public distress exists because of an insufficient supply of shelter" to acquire either improved or unimproved property and improve it or dispose of it so as to provide shelter, but the law has been interpreted as giving powers to meet only the emergencies of flood or storm or conflagration, and as not authorizing general municipal housing under the present shortage.

A New York legislative committee (1921-23) unearthed monopolistic combines among building material interests in New York and certain labor union groups which have been adding illegally to costs of building; indictments were found and a considerable number of persons convicted and fined or imprisoned.

The housing shortage and high rent situation has brought out certain noteworthy facts. The check to building which concerns middle class and more expensive houses, has created pressure among the poorest families, since they tend to occupy the cast-off houses of the next higher income group, and when there is a check to building good houses, the poorest section of the population may largely bear the resulting shortage. During a period of high rents many vacant houses may be available and yet grievous over-crowding exist side by side with them, since the unusual price makes it impossible for many families to rent a separate house. Thus in Bridgeport, it was recently reported that several families might be living in one house, although vacant houses were everywhere available. A housing shortage may be a lack of vacant housing, or it may be a lack of housing at the price that people can pay.

Securing capital for house building was sometimes the limiting factor in delaying new construction. The principal agencies for providing capital are the cooperative building and loan associations, the life insurance companies and local savings banks and trust companies. The commercial banks by their short time loans finance a great many building operations,[1] but they do not carry permanent mortgages as do the savings banks. The proposed Federal Home Loan System is the most important possibility of progress in this field.

Summary.—Good housing is as important to society as to the individual and a score and more of agencies combine in the modern movement for better housing. Meantime programs are forming to check the sources of housing evils, namely, speculation in land values, jerry building, monopoly control, housing ignorance, and low sanitary standards. Housing laws are now recognized as a legitimate exercise of the police power of the states, and in at least twelve states there are either state-wide or large-city laws setting standards as to light, air, sanitation and fire protection in new buildings, as to permitted alterations in old buildings, and also as to required improvements in them, and as to standards of housekeeping maintenance in rented dwellings. Ideally such legal standards must reach every building used for human occupancy whether single-family house, tenement, or institutional dwelling. City planning, or intelligently directing the growth of cities, and city zoning or districting which restricts height of city buildings (ideally to the width of the street on which they stand, or less), which provides standards for open areas on lots, and which excludes business structures from residence sections and separates apartments from districts to be given exclusively to detached residences, are the great new agencies for safeguarding living conditions as our communities grow. With high costs of housing, there have been appeals for government loans but very little direct aid has been given by the public. During the war the government built thousands of homes for

[1] See *Housing Problems in America*, 1920, 35.

its workers and incidentally set high standards that put housing ahead by a decade. A National Bureau of Housing Standards has been established at Washington and a few experiments in direct intervention, as by tax exemption on new construction and by Massachusetts' and California's house building and sale demonstrations have been tried. The proposed Home Loan bonds similar to Federal Farm Loan bonds, have been widely approved, in principle, and will doubtless be realized ultimately. Meantime the cooperative ownership of houses and of apartments, under way tentatively in several places, may prove a permanent advance in social methods of meeting housing needs.

ADDITIONAL REFERENCE

WILLIAMS, FRANK B. *The Law of City Planning and Zoning.* Macmillan.

CHAPTER VIII

FOOD AND THE FAMILY

Food in family life.—Eating together provides the occasion for much of the social life of the home; "table talk" is primarily the sharing of one another's experience by those about the family board. In this family group children may learn self-control, self-denial, regard for others, good temper, and how to talk, whether of idle happenings or of the experiences and news of the day. The whole situation as to home dining, usually in a room by itself, with flowers occasionally on the table, with attractive linen and other appointments, with attention given to color and form in the preparation of food, and with the social amenities of table etiquette and the opportunities for mutual consideration and courtesy, all these and other facts give food a social place in family life not equalled by any other material factor. The value of home privacy for rest and refreshment is in no way more strikingly shown than as regards eating with one's family. We go to a restaurant as an occasional interesting experience; we eat at home as a regular restful habit.

The family table is more than a school of manners; it is the seed-bed of family unity, and Ellen H. Richards's principle is correct, "Let us keep up the family table even if much that is set upon it comes from outside." A social work student sent to aid a family that was hardly if at all maintaining its unity found that they no longer sat down at the table but each member, adult and child, stood about and lunched when hungry. She insisted as the first step that the family meal be regularly prepared and that they sit down and eat together, and out of this beginning she remade the family

life. A cooperative housing club with a detached kitchenette house for each family and a club house with kitchens and one huge dining-room, could have improved its plans by also providing private family dining rooms at the central club house. It is highly desirable that parents and children eat together—all meals if possible, one meal at least. Because of the relation of food to the life of the home, it is wise to maintain the individual family dining-room even when congregate living is unavoidable. The director of an orphanage who housed his family of 200 in cottages with "cottage mothers" and who maintained individual kitchens and dining-rooms was fundamentally right in saying that "The smell of the kitchen and the feel of the cooky jar are essentials in the child's idea of home."

For families of moderate income as a device to save work, there has recently appeared an architectural innovation, "the breakfast alcove" or "The Pullman," just off the kitchen. The large kitchen is also reappearing where the mother is sole houseworker. Such arrangements may contribute to family solidarity when they express a just regard for economizing the house mother's strength, in the same way that the separate dining-room makes its contribution to family manners.

In the war, the whole nation ate together and we learned that we must express our democracy in terms of food economy as well as through military service. During and after the war, America's relief work helped place the world at a common table and international sympathy developed out of food relationships.

Food is an important means of expressing friendship, respect, and hospitality. Indeed, breaking bread with the one coming in from outside has from time immemorial created or sealed relations of personal obligation between host and guest.

Food is often an index of social position although doubtless not so commonly as are housing and dress which are matters of constant public notice.

The religious aspect of food, attested by the grace or bless-

ing, happily still common at family meals, arose doubtless in the time when food was scarce and uncertain, as an expression of gratitude to the divinity. This simple sign may be the only group religious observance in the home, but like the "unused family Bible" it is one of the deep-water signs of things that men live by.

Factors that control food choice and cost.—Food production by the family itself, thus short-circuiting the connection between production and consumption, was originally the most influential economic fact affecting food use; the fisherman's family uses more fish as food than does the average family; the suburbanite's garden or poultry products, and the farmer's pork determine in part the family's living. Similarily there has been historically a tendency for local food supplies, what a neighbor raises and will exchange, and what local production supplies, to determine what food will be used. Though this close connection of consumption and production has been true historically, there is a tendency for a wider market relationship to supplant it. So food-use in large cities has come absolutely upon an exchange basis—"what can I buy in the local market with the money I can spare for food"; and in smaller places it is almost as much so. Even the modern farmer is following the same tendency, buying more kinds and a larger part of his food and producing relatively less food so that his food supply is controlled socially.

There are two financial factors that control the family's food choice and costs: first, the family's money income, and second, the level of food prices in local markets where the family buys. As explained elsewhere there are levels of food use determined by income; moreover, the price level of different food stuffs determines practically how much of this and of that are to make up the real income of consumption goods enjoyed by the family. If potatoes go up in price, rice will be substituted; when meat and eggs are cheap more are used than when high.

Retail market prices are therefore a fundamental influence

controlling food costs as the family experiences them. Retail prices in turn depend upon wholesale prices, but they do not follow minor fluctuations in wholesale price; that is, while the wholesale price may go up or go down without the retail price following immediately, any large or permanent change in the wholesale price will shortly affect retail prices. The wholesale price of a given food stuff at any given time is determined by the amount of its supply relative to the demand for it in the market where the price is being set. The costs of producing food stuffs set an ideal or normal price level, since in the long run, the food will only be produced if the costs of production are reimbursed by the price; but the current market price turns on the present supply and demand in the given market. There are also obscure influences operating upon food prices such as the crop prospects of next year as well as the crop in hand, the general price level, and general business conditions. Among the ultimate controlling forces on the demand side are all influences that determine population, as immigration, marriage, birth and death rates. Of effect too, are personal and racial food habits, and the scale of personal incomes which determines how much in addition to a minimum food-standard the great mass of the population can secure. Demand, moreover, is a factor that may be changed by education and social progress. On the supply side whatever tends to affect the kinds and quantities of foods produced and brought to market concerns the consumer, and these controlling forces are discussed under the social aspects of the food supply (Chapter IX).

One important influence in food costs is the fact that the detached home as a supply depot handles small quantities and caters to a small group. Because of the higher cost of small quantity production, an occasional reformer would abandon the home's food service in favor of a canteen or otherwise centralized system of eating. But their reform is barred by the fact that we have in the household, primarily, a consumption agency developed out of the instinctive preference

for domestic privacy. Even if it costs more to eat at home, we go on doing so because we enjoy most spending our economic energies and resources that way.

The intelligence of the housewife who markets and cooks for her family is the most important single factor in the family food situation, and her future training is the most hopeful path to a better choice and controlled costs. But there are others whose cooperation must be had. Within the family circle the man's food whims and ignorances are often the real difficulty or that naïve deferring to the child's "I don't want 'milk'—or 'spinach.'" Full family cooperation must be had although reasonable play for personal likes and dislikes is justified if it contributes to the variety and satisfaction of life. These family likes and dislikes in the use of food and individual preferences will appear as an immediate and constant factor in food choice. They manifest themselves against the broader background of national or racial food usage. We recognize the psychological factors in our neighbor's table at least—the Italian who must have imported cheese, the workman who thinks he must have meat three times a day—though we are prone to overlook such whims as affecting our own costs. Some of these factors are racial, some religious, some due to family tradition and some to direct imitation of others.

The expression of hospitality in terms of food increases food costs. In the privacy of family life, we may put what we will upon our own tables, but when we entertain outsiders our table is in the lime-light, and there are many extra costs assumed on that score. A well-managed household on a comfortable income in an Eastern city was spending for food, in January, 1921, 93 cents per day per person, with a total monthly food bill of $149; three formal dinners in the month, 27 extra covers in all, cost $63 extra, or say, $2.33 a plate extra. Entertaining was expensive, but the housekeeper by her accounts knew what her entertaining cost her!

There is probably an increase of food cost with the typical household employee, that first of all is due to the unconscious

change in one's scale of living now that it has taken on a semi-public character. There are other new out-goes, too,—such as the wastes of preparation and of left-overs, the losses through careless methods of work. In general, such costs arise when hired labor, in any line, is substituted for self-service.

The almost universal desire for a variety of foods, some of the most essential of which are regarded as expensive, the different needs of the young, the aged, the sick, and other physiological facts, in part determine food choice and costs.

Finally, the changing food supply changes diet [1] and affects costs. With the decrease in meat supply relative to population, the cereal breakfast is supplanting the breakfast of meat or eggs; tropical fruits have in recent years been shipped in enormous quantities to the temperate zone; there is increased use of butter and cheese, of nuts and nut foods; sugar with its lowering in price has become a large item in our dietary and succulent vegetables will likely play a larger part on American tables.

Qualitative groups of food.—The classic grouping of food constituents includes carbohydrates, fats and proteins, and in addition to these, modern nutrition is giving almost equal attention to ash constituents or mineral matters and to vitamins. Carbohydrates comprise the sugars and starches which are important as sources of energy in our ordinary food supplies, and cellulose which the human body cannot use as food but which serves as roughage. Carbohydrates, chemically considered, are combinations of carbon, oxygen and hydrogen. Fats are solid or liquid food stuffs with the same chemical elements as carbohydrates but with very different well-known characteristics. Proteins are very complex compounds containing nitrogen and sulphur as well as carbon, hydrogen and oxygen combined in the form of amino acids. Typical forms of protein are found in lean meat, eggs, milk, nuts, the legumes or beans and peas, and in cereals. Since

[1] Mendel, L. B. *Changes in the Food Supply and their Relation to Nutrition.* Yale University Press, 1916.

the human body itself is in part composed of proteins, it is necessary to use proteins in the food in sufficient quantity, and this may be assumed to be true if 10 to 15 percent of the Calories (energy units) required for a given dietary come from protein foods. There are, however, seventeen different amino acids which go into the composition of proteins and a qualitative choice among them is important, those from milk, eggs and meat being preferred as they are more efficient for growth. It has been found that milk or a combination of cheese and milk makes an efficient substitute for the larger share of meat in the dietary, and is also more economical.

Ash constituents of the diet.—Among the dozen or more chemical elements found in the body and hence needed in its food, iron, calcium, and phosphorus are especially important. Iron is abundantly present in green vegetables, especially spinach. Calcium is found especially in milk and cheese and also in considerable amounts in vegetables. Phosphorus is found abundantly in milk, eggs, meat, and the outer coating of cereals and vegetables. In a varied diet that includes liberal use of milk, fruit and green vegetables daily, these mineral elements or ash constituents will be provided.

Vitamin content of food.—The vitamins are essentially stimulating or protective substances which have to do with body growth and controlling bodily functions so as to maintain normal conditions of health and prevent disease. So far three of them have been identified by their effects. They are known as vitamins A, B, and C. The two or three other vitamins whose existence has been suggested may be regarded as subdivisions of these and do not require separate study for any of our present purposes. Milk is the most important of all foods from the standpoint of vitamin content, being especially rich in vitamin A and containing important amounts of vitamins B and C also. The richest sources of vitamin C are the fruits and fresh vegetables which are also very important as sources of vitamin B. Hence the liberal use of fruits and vegetables and of milk in its various forms provides, along

with the needed mineral elements, abundant amounts of all three of the vitamins.

National consumption by food groups.—Pearl has computed the contributions made by the different food groups to the total consumption of the American people and his average figures for the six-year period ending 1916-17 are quoted:—[1]

National Consumption by Food Groups, Average 1911–12 to 1916–17.

FOOD GROUPS	PROPORTION OF TOTAL CALORIC VALUE	PROPORTION OF TOTAL PROTEIN CONSUMPTION	PROPORTION OF TOTAL FAT CONSUMPTION	PROPORTION OF TOTAL CARBOHYDRATE CONSUMPTION
Grains	34.68	36.01	3.98	56.11
Meats	21.63	26.38	50.66	.03
Dairy products...	15.26	20.38	27.49	5.48
Sugars	13.24	.01	.0	25.55
Vegetables	5.32	5.87	.41	8.66
Oils and nuts....	4.82	1.58	12.19	.35
Fruits	2.20	.69	.40	3.82
Poultry and eggs	2.02	6.74	3.39	.00
Oleomargarine ..	.42	.02	1.13	.00
Fish	.41	2.32	.35	.00
	100.	100.	100.	100.

These national consumption figures show that as regards caloric value, grains, meats, dairy products and sugars are our most important foods; and as regards protein, grains, meats and dairy products; judged by these two criteria of caloric value and protein value, grains, meats, dairy products and sugar are the large sources of our food supply; fruits and vegetables, which science has shown important for their mineral constituents and vitamin factors, contribute but 7.5 percent of total caloric value, but their part is dietetically necessary.

Indexes of individual food requirements.—Students of the cost of living early recognized that per capita food quantities and costs secured by dividing total food quantities and costs for a family or other group by the number of persons

[1] Pearl, Raymond. *The Nation's Food. A Statistical Study of a Physiological and Social Problem.* Philadelphia, Saunders, 1920.

composing the group, are a relatively inaccurate measure since persons vary as to the kinds and quantities of food necessary for them according to age, weight, degree of physical activity and other factors. Hence food measurements in terms of the equivalent requirements per adult man have been used.

Various investigators including Engel, Atwater, the United States Bureau of Labor and during the war the Inter-Allied Scientific Food Commission have given us indexes of relative Calorie food requirements for individuals of different sexes and ages, measured in percentages of the food requirement of an average adult man, which can be used for more accurately measuring food consumption and costs.

The best non-technical discussion of the food requirements of different ages will be found in Rose's *Feeding the Family*.

The United States Bureau of Labor Scale, used most often in cost of living studies, makes relative allowances as follows: male 15 years and over, 1.00; female 15 years and over, .90; children 11 to 14, .90; children 7 to 10, .75; children 4 to 6, .40; children under 4, .15.[1] (The allowance for small children has been criticized as too low.)

The Inter-Allied Scale allows for a child from birth to 6 years, .5 as much as an adult man; child from 6 to 10, .7; a child of 10 to 14, .83; girls over 14 years, .83 as much as the man; and an adult woman the same amount, .83; boys over 14 years and men, 1.00.[2]

Using these indexes of food requirements, it is possible to express numerically the total food requirement of any group; for example with a family of father, mother, and children of 5, 8 and 12 years, the respective individual food requirements by the Inter-Allied Index are 1., 0.83, 0.83, 0.7 and 0.5, or a total group requirement of 3.86 times the requirement of an average man. If the food for this family of five persons who are equal in food requirements to 3.86 adult men

[1] See *Minimum Quantity Budget*, U. S. Bureau of Labor Statistics, 1920. A more refined scale with finer divisions is also used by the Bureau.

[2] See Lusk, Graham. "Nutritional Needs of Adolescence," *Journal of Home Economics*, 1919, p. 285.

costs $16 a week we may say that the family is spending per adult man $4.14 a week ($16.00 ÷ 3.86); figured as a straight per capita cost for five persons, the amount would be $16 ÷ 5, or $3.20 per capita per week. By the use of such factors it is possible to compare the food requirements of different families of the same or different composition, and to judge relative costs. Suppose that another family of five persons including father, mother and boys of 14 and 16 and daughter of 18 spends $16 a week for food; the per capita cost is still one-fifth of $16 or $3.20 as in the first family; but the per man per week cost is quite different since this second family has 4.66 equivalent adult man units (1.+1.+1.+ 0.83 + 0.83) and so the cost per adult man is $3.43 per week ($16 ÷ 4.66) as compared with $4.14 per adult man in the first family.

The per capita measure does not distinguish differences in cost due to sex or age; the per adult man measure takes account of these two differentia. The latter does not, as often used, take account of differences in food requirement due to different conditions of physical activity as shown in occupation, or the fine individual differences of weight and body size; nor does it account also for the relatively higher pecuniary costs of special diets as those of young children, and hence is not a safe guide in determining the money allowances necessary in family relief work. The science of nutrition uses more accurate measures of individual food requirements where they are desirable; in social and economic studies the degree of accuracy secured by a per adult man scale and sometimes by a per capita scale is sufficiently accurate.

Calculating a family's food consumption.—A dietary study of a family is a measurement of the kinds and quantities of food consumed. Its interpretation includes a comparison of the food consumption with the ideal food standards which the science of nutrition recommends for a family of similar composition. Such a dietary study consists of three steps.

I. The weighing of the quantities of all foods eaten for a

week, which is accomplished by taking an inventory of all foods on hand in the house at the beginning of the week (listing each food separately, e. g. cornmeal, wheat flour, round steak, pork chops, sugar, molasses, etc.), adding the weights of the different foods purchased during the week and subtracting the weights of foods on hand at the end of the week. This gives a classified list of all foods consumed, measured in pounds and ounces. These gross consumption weights are to be transferred into weights of edible portions by the use of food weight tables [1] that allow for inedible food waste; and then by these tables the avoirdupois weight must be transferred into grams weight of protein, fat and carbohydrates consumed.

II. These consumption food quantities are then transferred into Calories or energy units by the equations that 1 gram protein yields 4 Calories; 1 gram fat, 9 Calories; 1 gram carbohydrates, 4 Calories; then the quantity of Calories consumed for the week is reduced to a per diem Calorie basis for this family group.

III. The ideal Calorie consumption for the given family per day is then estimated from standard dietary requirements such as the following:

(A) For a man, standards of Atwater and Benedict which allow for a man of average weight (154 lbs.) at various activities as follows:

Sleep	65 Calories per hour
Sitting at rest	100 " " "
At light muscular exercise	170 " " "
At active " "	290 " " "
At severe " "	450 " " "
At very severe muscular exercise	600 " " "

These values for practical purposes may be assumed to increase or decrease in proportion to body weight for men larger or smaller than the average of 154 lbs.

For the woman and children of the family group, Sher-

[1] Rose, M. S. Laboratory Handbook for Dietetics; or less convenient tables in Bulletin No. 28, Office of Experiment Stations, U. S. Department of Agriculture.

man's [1] statement that as a basis for estimating the dietary needs of a family, a woman requires the same number of Calories per pound of body weight as does a man of equal activity; and that children of normal size, development, and activity will require about as follows:

Boys 14–17 years	2,500–3,000	Calories	per	day
Girls 14–17 "	2,200–2,600	"	"	"
Children 10–13 years	1,800–2,200	"	"	"
" 6– 9 "	1,400–2,000	"	"	"
" 2– 5 "	1,200–1,500	"	"	"
" 1– 2 "	900–1,200	"	"	"

(B) Standards have been set for the Calorie distribution of the dietary among the three principal types of food to give optimum diet, as follows:

Protein may furnish from 10 to 15 percent of the total Calories, with a standard ratio of 12 percent, increasing to 15 percent for the nursing mother or the growing boy or girl, decreasing to 10 (or even to 8) percent for people who have passed middle age.

Carbohydrates may furnish from 45 to 70 percent of the total Calories with an average ratio of 58 percent. Carbohydrates may supply as much as 70 percent of the food, especially in minimum cost dietaries, with a tendency for the percentage to drop to 40 or 45 percent on liberal incomes as more protein and fat are then used.

Fats may furnish 20 to 40 percent of the total Calories, with an average ratio of 30 percent. The minimum fat allowance is 2.5 oz. per man per day, or 20 percent of a 3400 Calorie dietary, but where the energy requirements are increased the fat in some cases may run as high as 40 percent, provided the digestive organs are not over-taxed.

Illustration of a family dietary requirement.—A family consists of a man weighing 170 lbs., working 7 hours a day at active exercise as a clerk, sleeping 8 hours, resting 5 hours, and spending 4 hours at light exercise; his wife weighing 140

[1] Sherman, H. C. *Chemistry of Food and Nutrition*, p. 172.

lbs., with a similar distribution of hours of rest and activity; and three children, a boy of 16, girl of 12, boy of 10. The man's Calorie requirement if he weighed 154 lbs. would be:—

8 hours	sleep	@ 65	Calories per hour.....	520	Calories
4 "	resting	@ 100	" " "	400	"
7 "	active exercise	@ 290	" " "	2,030	"
4 "	light "	@ 170	" " "	680	"
Total Calorie requirement for a man weight 154 lbs. =				3,630	Calories
Requirement for this man weighing 170 lbs. is $\frac{170}{154} \times$ 3,630 = ...				4,006	Calories
Requirement for the woman weighing 140 lbs., $\frac{140}{154} \times$ 3,630 = ...				3,300	"
Requirement for the boy of 16 = ...				2,900	"
" " " girl " 12 = ...				2,100	"
" " " boy " 10 = ...				1,800	"
Total daily requirement for given family = ...				14,106	Calories

The daily food consumption of the family is then to be determined by the measuring method outlined under (1) and (2) above. We may assume that for the given family the daily average food consumption has been determined and transferred into Calorie values as follows:

Protein, 562 grams × 4 =	2,248 Calories	= 15% of total in	Protein
Carbohydrate, 1,870 grams × 4 ..... =	7,480 "	= 50% " "	Carbohydrate
Fats, 582 grams × 9.... =	5,238 "	= 35% " "	in Fats
Total daily food consumption ..... =	14,966 Calories		

Evaluation of this family's diet shows it to be adequate as regards the Calorie requirement since it provides 14,966 Calories when 14,106 are indicated as necessary.

If a given person actually consumes over long periods too many Calories or too few, the result will be a gain or a loss of body weight. From the standpoint of health "counting the Calories" is not usually necessary so long as a suitable body weight is being maintained, but from the standpoint of economy it is important for the housewife to know about how

many Calories she gets in a pound of each food that she buys and how many Calories she needs to obtain (on the average) for each dollar that she spends for food.

National food consumption per man.—Pearl gives a statistical quotient expressing the amount of edible food consumed per adult man in America.

NATIONAL FOOD CONSUMPTION. PEARL.

KIND OF FOOD	AVERAGE CONSUMPTION OF FOOD 1911-1918		ESTIMATED INGESTED FOOD
	Per annum	*Per diem*	*Per diem*
Protein	43.91 kg.	120 grams	114 grams
Fat	61.78 kg.	169 "	127 "
Carbohydrate...	197.45 kg.	541 "	433 "
	1,565,075 Calories	4,288 Calories	3,424 Calories

The figures given in the first two columns herewith represent the commercial demand per adult man upon the national food supply. Reducing these figures by the estimated percentage of waste of edible food in cookery and table service—which Pearl places at 5 percent for protein, 25 percent for fat, and 20 percent for carbohydrates,—this statistician determines (column three of table) the net amounts of ingested food per adult man per diem to be:—protein, 114 grams; fat, 127 grams; and carbohydrates, 433 grams, producing 3424 Calories per man per day.[1] The statistical average dietary is distributed as regards its Calories: 14 percent, Protein; 33.3 percent Fat; and 52.5 percent Carbohydrates (not far from the ideal distribution of 12 percent Protein, 30 percent Fat, and 58 percent Carbohydrates, as suggested above). These figures, secured by a statistical study of the national food production and the consumption for human nutrition (taking account of imports and exports in relation thereto), do not vary a great deal from the results of dietary studies of selected groups of families, where records are made of family food consumption. Pearl cites his own computation of averages for 116 families

[1] Pearl. *Op. cit.*, pp. 247-248.

which used 95 grams of protein, 113 of fat, and 447 of carbohydrates, with an energy quantity of 3185 Calories per day.[1]

Absolute cost standards.—Food materials, as purchased, cost (1923) from a minimum of approximately 30 cents per capita per day to a maximum of perhaps $1.50 per capita per day in American homes with incomes from that of the workingman up to that of $25,000 or so per year; or in terms of per man per day costs the range is from perhaps $.40 to $2.00. As indicated elsewhere, food cost relative to income tends to vary inversely with the size of the income, that is, the larger the income, the smaller the proportion of it which is required for food. But absolute food cost, that is the amount of money spent for food, tends of course to increase with income, both as a gross sum, and at equal pace as a per capita cost.

For how little can food be secured, and how do food costs vary above this minimum? Several levels of absolute food cost may be distinguished, and their objective criteria are here suggested and illustrated, partly in the form of menus which are intended to represent usage modified somewhat in the direction of better dietetic standards.[2]

1. The minimum level of food cost is that which will provide at the lowest possible cost, food materials in adequate quantity and combination to secure full working efficiency and mental satisfaction to the family of the unskilled laborer on the $1200-$1500 income. It is assumed that the plainest and least expensive food materials are used, and that they are provided in such combinations as are acceptable to the individual and family preferences of the persons concerned. It is understood that all work is done by the housewife or members of her family. Food on this level will cost about 30 cents per capita or nearly 40 cents per man per day. Typical menus would be: for breakfast, a cereal food as oatmeal or cornmeal, and bread or toast, milk for children, and coffee for adults; for

[1] Pearl. *Op. cit.*, p. 248.

[2] In this connection parallel reading in Rose's *Feeding the Family* is highly recommended.

dinner, a meat and vegetable stew, potato, cornstarch pudding or dried fruit, bread and butter, milk for children, cocoa for adults; for supper, bean soup (with milk), cornmeal muffins, butter, stewed prunes, or baked apples, milk for children, tea for adults.

There will be (1) a relatively large dependence on cereal food, requiring more than 30 percent of the cost of food; (2) a rather moderate use of meats (not over 20 percent in cost) with substitution of legumes and cheese for it (in practice meat will be desired and secured when possible in larger quantity); (3) milk will be adequately provided for children, but in restricted quantity for adults; (4) only the cheaper fresh vegetables and dried fruits, principally, can be used. It is understood that the essentials of an adequate diet are provided, sufficient in energy value to sustain fullest working power, with the necessary nutritive materials for bodily repair, growth and functioning.

2. The comfort level in food costs provides a variety of the standard foods of the market, with limited selection for quality, such as is common among families of skilled and clerical workers living on a moderate income of $1800 to $2200; that is, one that is 1½ to 2 times the standard wage for unskilled wage-earners. The work of the household on this cost level is still done entirely by the housewife, except that perhaps there may be one day's help a week or its equivalent in laundry sent out. Food on the comfort level will cost about one and a third times the minimum or say 40 cents per capita or 53 cents per man per day.

Typical menus might be as follows: For breakfast, a cereal, milk, stewed fruit, bread and butter, milk for children, coffee for adults; for lunch, soup, salad or meat substitute, bread and butter, milk for children, cocoa for adults; for dinner, hamburg steak, potatoes, spinach, bread, butter, custard, milk for children, and tea for adults.

3. The moderate level in food costs makes use of good grades of ordinary food stuffs, but not of unusual food delicacies, or

out-of-season luxuries, or other expensive foods. This level of food cost is found with incomes of $2500-$5000 or more. At this level, there is often hired help for two or three days a week, or possibly (rarely) a full-time worker. This is also the level of table service in courses, of soup and dessert as regular parts of a family dinner. Food costs will be approximately two or three times the minimum or 60 to 90 cents per capita or $.80 to $1.20 per man per day on the moderate level.

Typical menus might be: For breakfast, orange, cereal, rolls, milk, coffee; for lunch, meat substitute preferably made with milk or cheese, salad, rolls, milk for children, tea for adults; for dinner, soup, roast, potatoes, carrots, fruit, bread and butter, milk and coffee.

4. The liberal level of cost may provide unusually choice food and expensive additions to the menu, such as tropical and other unusual fruits, imported delicacies, game, and other foods esteemed for special flavors. Food costs will be three to five times the minimum or $.90 to $1.50 per capita, or $1.20 to $2.00 per man per day.

Typical menus might be: For breakfast, grapefruit, choice of hot or cold cereals, bacon, eggs, toast, marmalade, coffee, milk for children; for lunch, soup, steak, potatoes, rolls, iced fruit, milk for children, tea for adults; for dinner, fruit cocktail, consommé, fish, poultry, creamed celery, salad, ice, milk for children, coffee for adults.

This is the level of the income of $6000-$25,000 and upwards. It is the level of the organized household with housework done by hired employees with specialized duties as cook, butler and waitress; of the regular formal dinner service comparable to the formal entertaining service on the level just below. On this level, food is administered as an index of social position; its cost is no longer largely controlled by immediate bodily needs of nutrition; it is psychologically and socially determined, hence can and does show a wide variation. It is characterized by purchased and specially made desserts, ices, etc., by sauces and dressings specially prepared. This is

the field of the professional cook where every meal may be a product of a chef's art, and where the liberal level passes over into the luxury level. Obviously, a considerable part of the food cost on these levels may be pure waste, since more food is prepared than can be eaten, since the table is always ready for guests, and food is used to express social position and to give mental pleasure, sometimes simply to impress others. Waste is likely to occur in marketing as well as in the kitchen. To the woman at the head of such a home comes the opportunity to "look well to the ways of her household," and to establish order and reason both for her own satisfaction, for sound ideals for her children and for reasonable work standards among her employees. She can have her share in promoting reasonable domestic economy, and such a use of wealth as promotes general economic welfare and social soundness. Just how far food expenditure of this extreme sort is socially justifiable is, of course, an important issue.

Relative costs of food on these four levels.—If the minimum cost level is represented by X, the comfort cost level is about 1⅓ X, the moderate level is about 2X-3X, and the liberal level is from 3X to 5X and upwards. The minimum cost level is today about 30 cents per capita per day or 40 cents per man unit per day; an estimate of adequate nutrition made by the Nutrition Council of New York in March, 1922, sets the minimum for a man at $2.50 a week or about 35 cents a day for 3000 calories, and $2.95 a week or about 42 cents for 3500 calories.[1] All of these costs concern the raw food materials as purchased, and do not include other items of domestic food cost such as fuel and labor. They are all to be understood as approximate figures which measure roughly the cost of foods on four levels of living which can be found in most

[1] *Good Nutrition and Adequate Food Allowances for the Family.* Committee on Economic Standards, New York Nutrition Council 1922. This presentation of "a method for determining an adequate minimum food allowance" will prove very helpful to teachers and social workers who wish to determine local minimum food standards and administer them under varying family conditions.

communities. The four levels may be summarized in a table as follows:

Levels of Cost for Food Materials.

ECONOMIC LEVELS	INCOMES	PER CAPITA PER DIEM	PER MAN PER DIEM	RANGE OF FOOD CHOICE
Laborer	$1,200–1,500	$.30 (X)	$.40	No food choice, necessities for good nutrition.
Skilled Mechanic, Clerk, Teacher ..	$1,800–2,200	$.40 (1 1/3X)	$.53	Limited selection of food.
Business man and Professional Worker	$2,500–5,000	$.60–.90 (2 to 3X)	$.80–1.20	Good variety but no luxuries as out of season buying, etc.
Professional and Business Leader.	$6,000–25,000 and upward	$.90 and up (3 to 5X)	$1.20–2.00 and up	Large variety and luxuries, out of season foods, choicest cuts of meats, etc.

Relative food cost.—The relative cost of food in the family budget concerns the percentage spent for food, considered in proportion to other items in the budget. In general in America, Engel's law has been proved to hold true that the percentage spent for food varies inversely with total expenditures, decreasing as total expenditure increases. The proportion spent for food becomes thus an index of the standard of living, of economic status and progress of a family; it may be an index of changes in national prosperity, a measure of the progress of one nation compared with another.

Engel published in 1857 some calculations based on Belgian budgets showing that food required 70.4 percent of $113, 67.4 percent of $160, and 60 percent of $239 incomes; and in his normal table of expenditures for families in Saxony he estimated that incomes under $240 required 62 percent for food, those of $240-$600 required 55 percent and those over $600 required 50 percent.

The Massachusetts Labor Report for 1885, shows that food costs in that state decreased from 64 percent to 51 percent of the total expenditures as incomes rose from $300-$450 to $1200

and over; in Massachusetts in 1901, the food percentage for these incomes varied from 56 to 54 percent. The United States Labor Report of 1903 found that the average food percentage for the United States decreased from 46 percent to 36 percent as incomes increased from $500 to $1200. But Chapin found that New York City working families in 1907 with from $600 to $1200 a year spent 44-45 percent for food, and that this percentage for food did not decrease until above the $1300 level of expenditure, due to the high cost of housing to lower income families which made it impossible for them to secure the higher percentage for food which lower incomes normally demand.

Beyer found in Philadelphia (1918) that the food percentage varied from 48.7 percent at $600 to 39 percent at $1700, rising to 41.9 percent at $1900, with an average of 44.1 percent for all incomes.

The average food expenditure for working families of various incomes as determined by different investigations of the United States Bureau of Labor has been 43.13, 45.01, and 43.31 percents; by the Chapin New York study 44.7 percent. Averaging these and certain other figures, the National Industrial Conference Board has used 43.1 as the basic percentage of income going to food in American working families on a fair minimum standard.

The average of 35 percent in American "comfort" budgets has already been mentioned, also the finding in 1918-19 among 12,096 industrial families in 92 different centers that food costs decreased from 44 percent to 35 percent as incomes increased from below $900 to over $2500, with the average cost 38.2 percent.

One may conclude therefore that minimum workingmen's incomes use between 40 and 45 percent for food, and "comfort" workingmen's incomes about 35 percent to 40 percent; and that as incomes increase still higher the food percentage drops to 30 and 25 percent or less, thus freeing more of income for non-physical needs.

Daily family food costs.—Per capita daily food costs are, of course, secured by dividing the total cost of food per week or month by the number of days, and then by the number of persons consuming it. They are useful as giving an approximate measure of the range of family food costs, although not so accurate as per man per day costs.

In the average family with children and adults, the approximate per capita food cost will be a smaller figure than the per man per day food cost; using the Inter-Allied food factors the average per capita food requirement has been found to be .8 the requirement per adult male's food requirement. Hence in general comparisons of cost, a per man per day cost multiplied by .8 equals a corresponding per capita cost and a per capita cost divided by .8 equals a corresponding per man per day cost. If the comparison is being made for the family unit of parents and three small children of 10, 8, and 6, the factor by the Inter-Allied Scale is about .75.

Per capita family food costs.—Per capita food costs were secured in 1920-21 at meetings of women's clubs by asking persons present who knew their food cost per month to report it and state the number of persons in the family. From data so secured the range of food costs per person per day (not per man per day) was computed. The costs varied in the different groups; the medians for each group, $.57, $.75, $.86 and $1 (for two groups) are the most significant items in the table below.

Family Food Costs Per Capita.

PLACE	DATE	NO. OF FAM.	PER CAPITA COST			
			MINIMUM	MAXIMUM	MEDIAN	50% OF THE FAMILIES
New Haven.....	Nov. '20	21	.40	1.30	.75	
Garden City.....	Nov. '20	37	.58	1.83	1.00	
Westchester	Jan. '21	10	.40	.95	.57	
New York.....	Feb. '21	7	.50	1.40	.86	
New York.....	Apr. '21	15	.43	1.66	1.00	
New Jersey.....	June '21	27	.34	1.08	.66	
New York suburbs	Spring '21	21	.39	1.04	.54	.48–68

According to reports furnished by the twenty-one families living in New York suburbs in 1921 on incomes from $135 to $1000 a month, their monthly food costs varied from $35 to $212 a month. The per capita per diem food costs varied from 39 cents to $1.04 with the median at 54 cents and one-half the families spent from 48 to 68 cents per capita per diem as given above; for this group data were available for computing costs per adult man, and these costs varied from $.43 to $1.23 with the median at 67.6 cents per man per day, and half the families spent from 59 to 80 cents per man per day. The median per capita of 54.5 cents is approximately .80 of the median per man cost of 67.6 cents, the ratio stated above.

Per man food costs.—The Chapin study determined a minimum of 22 cents per man per day to be necessary for adequate nutrition in New York in 1907, and this has been often used as a basis of cost comparisons since.

The "92 city family dietaries" showed (1914-15) a range of cost per man per day in New York from 11.2 cents to 76 cents with an average of 39.2 cents; the greatest frequency of cost was from 25 to 35 cents with approximately one-fourth spending less than 25 cents and one-fourth more than 40 cents.[1] A study of racial and other differences in dietary customs[2] among Italian, Jewish and Negro families in New York (1918) showed costs per man per day that varied from 15 cents to 60 cents and above with the median cost 35 to 40 cents per man per day. About one-fourth of the families spent less than 30 cents and one-fourth more than 45 cents. The Italians secured an adequate dietary at 38 cents per day; the others at from 46 to 52 cents. The United States Department of Labor[3] found in ten cities (1918-19) that the per man per day food cost varied from the minimum of 42.6 cents in St. Paul, and

[1] Sherman and Gillett. *Adequacy and Economy of Some City Dietaries.* New York Association for Improving Condition of Poor, p. 4.

[2] Philips and Howell. "Racial and Other Differences in Dietary Customs." *Journal of Home Economics,* 1920, pp. 396-411.

[3] Ogburn, W. F. "A Study of Food Costs in Various Cities," *Monthly Labor Review,* August, 1919.

Minneapolis to a maximum of 57.6 cents in New York, for 3500 Calories per man per day with a family of five on $1300 per year.

Institution food costs per capita.—Food maintenance for inmates of the New York State Prisons cost during the year ending June 30, 1920, an average per diem per capita of $.285. The dietary is indicated by the following menu for Sing Sing Prison for April 2, 1921: Breakfast—Hash, bread, coffee; dinner, lamb stew, bread and coffee; supper, vegetable soup, crackers, bread, tea.

The Faculty Club of a Pacific Coast University served about 140 men three meals a day during May, 1921, at a per diem per capita food cost of $.483.

A mid-western University lunch room serving 380 women one meal a day had at the same time a food cost of 14.6 cents per woman per meal. If this figure be considered one-third the cost of a three-meal service, the cost would have been 43.8 cents—and if this be transposed to a cost per man per day by the index of .8 (the relative food requirement of the average woman compared to the average man) it becomes 52.7 cents per man per diem.

A practice house at a New England agricultural college with 12 women in residence and occasional guests, and buying meats, cheese and eggs in quantity rather cheaper than city prices had a per woman per diem cost of 43.6 cents in 1919-1920 which similarly transposed into a per man per day cost would be 52.5 cents.

The United States Army ration,[1] with food bought at whole-

[1] Average cost of Army ration. (Letter from Quartermaster General, February 10, 1922.)

FISCAL YEAR	CENTS	FISCAL YEAR	CENTS
1890	13.18	1899	13.62
1891	14.71	1900	16.97
1892	16.05	1901	16.18
1893	15.94	1902	16.24
1894	15.10	1903	17.56
1895	14.42	1904	17.33
1896	14.15	1905	16.18
1897	12.51	1906	15.16
1898	12.81	1907	15.74

sale, cost 24 cents per diem in 1914, 48.2 cents in 1918, and 29.9 cents in 1922.

The average daily cost of the United States Navy rations for ten battleships for the three months ending March 31, 1921, was $0.64.[1] A typical Navy menu follows: Meals were served in the general mess of the U. S. S. *Pennsylvania* on Monday, May 9th, 1921, as follows:—Breakfast—Fried beef liver and bacon, Lyonnaise potatoes, onion gravy, apples, bread, butter, coffee; Dinner—Vegetable soup, pot roast of beef, boiled sweet potatoes, stewed lima beans, brown gravy, bread, coffee; Supper—Veal croquettes, tomato sauce, Spanish rice, succotash, cottage pudding, lemon sauce, bread, butter, coffee.

A series of nine dietary studies in sororities at the University of Illinois in 1919 showed costs per person from 37.1 cents to 43 cents a day with an average of 40.3 cents for an average Calorie value of 2419. The 40.3 cents average divided by the factor of .8 becomes a cost of .503 per man per day.[2]

A dietary study at Vassar College (1917) showed a cost of 42 cents per person (woman student) for 2698 Calories (transferring by a factor of .8, this would be equivalent to a per man per day cost of 52 cents.) [3]

Analysing family food costs.—This may most readily be done by keeping a record of all food expenditures for one month. In most urban families one who is seeking approximate results only can disregard quantities on hand at the beginning of the month, and at the end, since they will about balance

FISCAL YEAR	CENTS	FISCAL YEAR	CENTS
1908	18.66	1916	28.01
1909	21.05	1917	33.02
1910	21.44	1918	48.20
1911	23.35	1919	49.75
1912	23.78	1920	52.68
1913	23.41	1921	38.5
1914	24.39	1922	29.9
1915	24.96		

[1] Letter of David Potter, Paymaster General, June 2, 1921.

[2] Bevier, Isabel. "Dietary Studies." *Journal of Home Economics*, 1920, 63.

[3] *Journal of Home Economics*, 1918, p. 97. The cost for food and service and preparation was $.184 per meal.

each other; but in case the family buys food in quantity it will be necessary to take account of this factor either in an accurate way by taking inventories at the beginning and end of the month or by making approximate estimates for these factors.

With the family which buys food on account, the monthly food bill is therefore a good basis for analysing food costs. Where there are cash purchases, in whole or part, it is necessary to keep a written account; quantities as well as costs may well be entered, although even a classification of costs will be useful. The record can be conveniently taken care of on a columnar form with the following headings at the top of the columns: Date, item, meat and fish, eggs, milk and cheese, bread and cereal foods, fruits, vegetables, sugar and sweets, butter and fats, beverages and miscellaneous foods. For each kind of food, two columns should be provided headed respectively, "quantity," "cost." Then each cash food expenditure can be entered in the appropriate column as the purchase is made; when cash expenditures alone are entered, it will be necessary at the end of the month to analyse the charge account and get the totals for all types of food expenditures. Or, if desired, all charge items can also be entered in the appropriate columns as made day by day, so that the form will give a complete classification of all food expenses during the month, both cash and credit. The total at the end of the month for the various groups of foods can then be compared with standard divisions of the food budget.

The value of this analysis of family food costs may well be emphasized. Food is the largest single item of living costs so that its amount is well worth study by itself for its relation to living costs. Its amount turns on daily marketing decisions so that there is a constant possibility of revision and control to meet necessary standards of economy or a desirable distribution of food costs between different types of food. Checking food costs is a practical project in household accounts requiring only a month or so to yield interesting and helpful

facts. It makes therefore a useful first step in household accounting.

Consumption and costs of different foods.—The United States Bureau of Labor cost of living study of 1900-02, gives facts as to average quantities of different food-stuffs consumed

QUANTITY AND COSTS OF FOODS IN FAMILY CONSUMPTION, 1900–02.

KINDS OF FOOD	QUANTITY PER FAMILY [1]	QUANTITY PER ADULT MALE [2]	COST PER ADULT MALE [3]	PERCENTAGE OF TOTAL FAMILY FOOD COST FOR YEAR [4]
Fresh beef	349.7 lbs.	95.98 lbs.	$13.78	15.3
Salt beef	48.6 "	11.05 "	1.20	1.6
Fresh pork	114.2 "	28.47 "	3.57	4.29
Salt pork	110.5 "	26.96 "	3.52	4.25
Other meat	77.7 "	22.73 "	2.83	2.99
Poultry	67.7 "	19.44 "	2.75	2.90
Fish	79.9 "	20.46 "	2.06	2.45
Eggs	85.2 doz.	23.48 doz.	4.72	5.14
Milk	354.5 qt.	103.71 qt.	6.62	6.52
Butter	117.1 lbs.	30.13 lbs.	7.49	8.80
Cheese	16 "	4.38 "	.72	.8
Lard	84.4 "	22.5 "	2.52	2.86
Tea	10.6 "	3.13 "	1.57	1.62
Coffee	46.8 "	13.37 "	3.07	3.28
Sugar	268.5 "	69.57 "	4.05	4.82
Molasses	3.6 gal.	1.06 gal.	.49	.52
Flour and meal	680.8 lbs.	166.25 lbs.	4.16	5.13
Bread	252.7 loaves	75.85 loaves	3.77	3.81
Rice	25.1 lbs.	7.90 lbs.	.62	.63
Potato	14.7 bu.	3.96 bu.	3.60	3.95
Other vegetables	.....	.....	....	5.77
Fruits	.....	.....	....	5.05
Vinegar, pickles	.....	.....	....	1.26
Other food	.....	.....	....	6.24
			91.31	100.

[1] 18th Annual Report U. S. Bureau of Labor Statistics, 1903, p. 648, facts for 2567 families.

[2] *Op. cit.*, p. 626 ff., facts are for 1043 normal families.

[3] *Op. cit.*, p. 626.

[4] *Op. cit.*, p. 650, for 2567 families; the complete table classifies consumption by different geographic sections, which brings out interesting differences, for example, in consumption of salt beef, the North Atlantic states rank higher than the rest of the country; in pork products and eggs the Western states ranked low; in milk, the South Atlantic states and South Central states ranked low and in cheese the Western states.

by the American family (column 1 of table opposite); average quantities consumed per nutrition unit, the adult male, (column 2); cost of different foods per nutrition unit, the adult male (column 3); and percentage of total family food cost per year represented by cost of individual foods (column 4). This last item is particularly interesting for it appears on grouping and comparing items that, in the average family in 1901, the meats and fish cost 33.8 percent; milk cost 6.5 percent, and milk and cheese cost 7.3 percent (milk cost has increased relative to other food so that these percentages today would be relatively higher); cereals and bread cost 9.5 percent; butter and lard cost 11.6 percent; sugar and molasses, 5.3; vegetables, 9.7 percent; fruit, 5 percent; tea and coffee, 4.9 percent; and other foods, 7.5 percent.

The following table gives percentage distribution of food costs derived from several more recent dietary studies:—"92

PERCENTAGE DISTRIBUTION OF FOOD COSTS.

FOOD ITEMS	"92 CITY DIETARIES" [1]		WESTERN FACULTY CLUB [2]	NEW ENGLAND COLLEGE PRACTICE HOUSE [3]	105 FAMILIES IN NEW YORK [4]
	RANGE OF COST	AVERAGE COST			
Meat-Fish	6.4–49.1	33.2	40.	28.	26.0
Eggs	0.0–15.9	5.6	3.6		5.3
Milk-Cream	1.3–21.9	9.1	8.1	16.1	11.0
Cheese	0.0– 8.9	1.1	...	....	1.0
Fats	0.0–21.8	8.1	5.8 (butter)	10.	8.3
Grain Products	3.8–42.8	17.9	3.2 (bread alone)	10.6	25.4
Sugar	0.0– 9.2	3.8	...	5.2	3.0
Vegetables	0.4–19.1	9.1	12.	24.8	14.3
Fruit	0.0–17.1	6.0			
Nuts	0.0– 7.7	0.4	...	....	0.3
Miscellaneous	0.0–17.6	5.7	26.9	4.4	5.4

[1] Sherman and Gillett. *Adequacy and Economy of Some City Dietaries*, p. 9 (Facts for 1915-16).

[2] Data from letter (1920-21).

[3] Data from letter (1919-20).

[4] Philips and Howell. "Racial and Other Differences in Dietary Customs," *op. cit.*, p. 406 (Facts for 1917-18).

city dietaries," a Western Faculty Club, a New England College practice house, and "105 New York Families." Meat represents 33, 40, 28 and 26 percent respectively of the total costs; grain products, 17.9, 10.6 and 25.4 percent respectively; vegetables and fruits, 15.1, 12, 24.8 and 14.3 percent; milk and cream, 9.1, 8.1, 16.1 and 11 percent. The conclusion of the "92 dietaries" was: "From these results (92 city dietaries) it would seem as though the family dietary, at least among city people of limited means, is often relatively poor in energy and calcium, and sometimes also in iron or phosphorus. As the percentage expenditure for meat increases the diet tends to suffer in energy. As the relative expenditure for grain products increases, the energy is increased. Calcium seems to be dependent to a large extent on the amount of milk used, and both iron and calcium are favorably influenced by increasing the proportion of expenditure for vegetables and fruits. In the average diet the expenditures for milk, vegetables and fruit are much overbalanced by the expenditure for meat. If there were an equal expenditure for (1) meat, (2) milk, (3) fruit and vegetables, there is little doubt that the results in food value would be more favorable to a well balanced diet." [1]

Sherman's food budget.—Sherman [2] reviewing the above and similar data in the light both of the modern knowledge of nutrition and of the practical experience of older countries, concludes that the average American dietary can and will be much improved (and the industries of food production will also benefit) by a shifting of emphasis in the food budget away from the present large expenditure for meat and toward a larger expenditure for milk and vegetables. He records that in his own household consisting of three adults and four growing children the distribution of the money expended for food is approximately as follows:

[1] Sherman and Gillett. "Adequacy and Economy of Some City Dietaries," *op. cit.* p. 18.

[2] Sherman, H. C. *Chemistry of Food and Nutrition.* 2nd Edition, p. 390.

	PERCENT OF TOTAL COST OF FOOD
Meat, poultry and fish	10–15
Eggs	5–7
Milk	25–30
Cheese	2–3
Butter and other fats	10–12
Bread, cereals, and other grain products	12–15
Sugar, molasses and syrup	about 3
Vegetables and fruits	15–18

Sherman also suggests that the money spent for food be so distributed that:

1. As much or more shall be spent for milk as for meat.
2. As much or more shall be spent for vegetables and fruit combined as for meat, or
3. Spend no more for meat than either for milk or for vegetables and fruit combined.

The Gillett $10 food budget.—The following division of every ten dollars spent for food has been found to provide the right kind of a diet for the whole family and especially for the children. It will be noted that this does not assume that $10 will provide the necessary food, it may require $12 or $15 or $20 or some other amount; but every ten dollars may well be spent as shown in Column I or every dollar as in Column II.

KINDS OF FOODS	I, OF EVERY $10	II, OF EVERY $1
For bread, cereals, rice, spend	$2–3.00	20–30 cents
For milk and cheese, spend	2–3.00	20–30 "
For vegetables and fruit, spend	1.70–2.75	17–27 "
For meat, fish and eggs, spend	1.70–2.20	17–22 "
For other groceries as fat, sugar, cocoa tea, coffee, spend	1.20–1.50	12–15 "

In families where there are young children the amount spent for meat should not be more than the amount spent for milk and cheese; the amount spent for vegetables and fruit should be at least as much as the amount spent for meat; and the amount spent for bread and cereals should not be over

one-third of the total food expenditure. This budget was drawn up by Miss Lucy H. Gillett [1] for nutrition work with families and she states her experience with it thus: "In hundreds of families where the above suggestions have been followed, underweight children have been brought up to normal and frequently the mother found that she spent $1.00 less a week for food for the family."

A $10 Grocery Order.—The Dietetics Bureau, Boston, issued the following grocery order [2] to indicate what could be done for about $10 a week in October, 1921, with careful buying and no waste in preparation or at table.[1] The table can readily be repriced in any community, at any time.

For this suggestive food order for a family of five—2 adults and 3 children; boy, 10 years old; girl, 7 years old; boy, 3 years old, see table on following page.

Winslow food weight standards.—Miss Emma A. Winslow has devised a schedule of standard food allowances by weight for individuals of both sexes and of various ages and degrees of activity for use in checking family food consumption as to adequacy of amount and variety. The amounts are stated in terms of a week's consumption. In using the table with a given family the standard weights of different types of food allowed for the different individuals of the family are selected from the schedule below and added together to give the standard weights of different foods for a family of the composition concerned. The actual weights of food consumed by the family are then written down, from the housewife's memory or better from her weekly marketing records or bills, and variations of the actual amounts from the standards set are then appraised. (See Winslow Schedule, p. 272.)

[1] With New York Association for Improving Condition of the Poor; some time, director of Dietetics Bureau, Boston, by which the above budget was issued in 1918.

[2] See also Gillett, Lucy H. A minimum food allowance and a basic food order. *Journal of Home Economics,* 1920, pp. 319-324.

For a similar weekly food order, see *Good Nutrition and Adequate Food Allowances for the Family.* New York Nutrition Council, 1922. Its cost is $9.65 per week for a family of five (March, 1922).

WEEKLY GROCERY ORDER, $10 (see p. 270)

FOOD	AMOUNT	UNIT COST	TOTAL COST
Milk	21 qts.	.15½	3.26
Cheese or peanut butter	½ lb.	.27	.14
Eggs	6–12	.55	.55
Meat and fish	5–6 lbs.	Meat .35–Fish .06	1.23
Fish, salted or smoked	½ lb.	.20	.10
Potatoes	1 pk.	.45	.45
Beets, cabbage, carrots, onions, spinach, squash, string beans or other inexpensive vegetables in season	9–11 lbs.	.05–.07	.63
Beans, or peas, dry	1½ lbs.	.07	.11
Fruits, dried— Prunes, apples, raisins, dates, peaches when not more than 25¢ a lb.	2 lbs.	.20	.40
Fruit, fresh— Apples, bananas, oranges and other fruits in season	4–6 lbs.	Apples .10 lb. Oranges .04 apiece	.40 .12
Bread	12 lbs.	.08	.96
Cornmeal, cornstarch, farina, flour, graham flour, macaroni, rice, rolled oats, tapioca	9–11 lbs.	....	.55
Sugar	3 lbs.	.06	.18
Molasses	1 pt.	.18	.18
Butter substitute	3 lbs.	.30	.60
Lard, salt pork		.15	.08
Oil or other fat		Salt pork .15	.08
Cocoa	¼ lb.	.18	.05
Tea	2 oz.	.45	.06
Coffee	½ lb.	.32	.16
Sundries	.10	....	.10
Total			$10.39

The Winslow schedule follows, and after it, a report from a family is given and its comparison with the standard allowance.

SCHEDULE FOR ESTIMATING WEEKLY FOOD QUANTITIES AND COSTS. WINSLOW.

KIND OF FOOD	FOR MAN OR BOY OVER 14 YRS.	FOR WOMAN OR GIRL OVER 14 YRS.	FOR CHILD 10–13 YRS.	FOR CHILD 6–9 YRS.	FOR CHILD 2–5 YRS.	FOR CHILD 10–24 MOS.
Milk, quarts.....	3–4	3–4	3–4	3–4	4–6	6–7
Eggs	2–3	2–3	2–3	2–3	3–4	3–4
Meat, fish, lbs.....	1¾–2	1½–1¾	1–1½	¾–1	0–¼	....
Meat substitutes, lbs.	⅓–½	¼–⅓	¼–⅓	⅙–¼	....	....
Potatoes, lbs.....	5–6	4–5	3–5	2–4	2–2½	½–1
Other vegetables, lbs.	2–3	2–3	2–3	2–2½	1–1½	½–1
Fresh fruit, lbs.....	½–1	½–1	½–1	½–1	½–1	¼–⅓
Dried fruit, lbs.....	¼–½	¼–½	¼–½	¼–⅓	¼–⅓	¼
Bread, lbs.....	4½–6	3–5	2½–4¾	1½–2½	1¼–1¾	¾–1
Cereals and cereal products, lbs.....	1–2	¾–1¾	¾–1½	¾–1	⅝–¾	¼–⅜
Fats, lbs.....	¾–1	⅝–¾	½–⅝	⅜–½	¼–⅜	⅛–¼
Sugar, lbs.....	¾–1	⅝–¾	⅝–¾	½–⅝	⅜–½	⅛–¼
Total Calories per day.....	2,500 to 3,000	2,000 to 3,000	1,750 to 2,800	1,400 to 2,000	1,200 to 1,700	1,000 to 1,300

It is assumed that meat and fish will be used in the proportion of four parts of meat to one part of fish, and that meat substitutes will be legumes and cheese, used in the proportion of two parts legumes to one part cheese.

Three-fourths of a pound of cereal is the equivalent in calories of one pound of bread; if family uses cereal or cereal products in larger or smaller proportion to bread than indicated, make corresponding change in quantities advocated.

Make variations in above quantities according to family's present food customs, the health conditions, age, and amount of physical activity of the members of the family.

From the following report one might suggest to the family a larger consumption of milk and possibly of breadstuffs and potatoes; and there could be a little less fresh fruit used although where the excess expenditure can be well afforded it is a desirable item in the dietary.

WEEKLY FOOD REPORT—FAMILY OF TWO ADULTS—MAN AND WOMAN. (WINSLOW SCHEDULE).

FOOD	AMOUNT USED IN THIS HOUSEHOLD	STANDARD AMOUNT FOR MAN AND WOMAN. WINSLOW TABLE
Milk	3–4 qts.	6–8 qts.
Eggs	10–12	4–6
Meat and fish	3¾–4 lbs.	3¼–3¾ lbs.
Meat substitutes	¾ lb.	7/12–1½ lbs.
Potatoes	4–5 lbs.	9–13 lbs.
Other vegetables	5–6 lbs.	4–6 lbs.
Fresh fruit	4 lbs.	1–2 lbs.
Dried fruit	¼–½ lb.	½–1 lb.
Bread	4–5 lbs.	7½–11 lbs.
Cereals, etc.	2 lbs.	1¾–3¾ lbs.
Fat	1¾–2 lbs.	1⅜–1¾ lbs.
Sugar	1½–2 lbs.	1⅜–1¾ lbs.

Home food production.—A home garden will provide not only annual vegetables but also, with a little forethought, the more or less permanent vegetables, as asparagus and rhubarb, and small fruits. In addition to vegetables and small fruits, and indeed large fruits where the homestead is owned, a small 50-foot lot, or better, a 100-foot one, can produce additional foodstuffs from poultry, rabbits, squabs, bees or even a goat. On the farm, of course, larger animals may be raised or kept to contribute to the family's living.

Garden, fruit and live creatures about a home are not only productive enterprises; they are equally important, and sometimes much more so, as consumption goods, that is, a source of interest to adults and children alike, and to the latter they of course bring invaluable educational experiences.

As an economic enterprise it is not difficult on a village lot to add $100 a year, at present values, to the family living in this way, and $100 added to a minimum or moderate income brings many comforts.[1]

[1] Facts were quoted in Chapter II on the income from village gardens, etc.

An investigation of the cost of living on Minnesota farms, 1905 to 1914,[1] showed that of the total value of food used, nearly one-half (48 percent) was produced on the farm where used. The total annual cost of living per person averaged $162.00, divided as follows: cash groceries 24 percent, farm products 22.1 percent, labor 28.7 percent, equipment 5 percent, fuel 7 percent and rent 13.2 percent. The average cash expenditure per person was $54.08 or 32.6 percent of the total cost of living. Of the cash expenditure, 72 percent was for purchased food and the rest for fuel and labor. Of the total cost of food, whether purchased or produce used, 52 percent was spent for groceries, 38.7 percent represented animal products from the farm, and 9.3 percent vegetables grown on the farm; so that farm products comprised 48 percent of the value of food used. The average annual cost of food used was $74.98 per person, or $377.69 per family. This food cost was divided into 52 percent for purchased food, or $196.64 per family; 38.7 percent for farm live-stock products used, or $146.42 per family; and 9.3 percent for farm vegetables used, or $34.63 per family. The food produced and used on the farm was therefore $181.05 per family, or $35.94 per person. The following average quantities of produce per person were consumed annually on one set of farms investigated: Whole milk, 133 qts.; cream, 42 qts.; skim milk 75.8 qts.; butter 48.1 lbs.; eggs 40.2 doz.; poultry 19.8 lbs.; pork 67.6 lbs.; beef 27.4 lbs.; mutton 2.7 lbs.; potatoes 12.1 bu.; garden products, $4.16 worth.

Home canning costs.—Mrs. Woodbury's study of home canning showed that home-canned products using home-grown vegetables, produced at one-half of local market prices, would average not taking labor into account about one-third the market cost of similar canned goods. In other words she was able to credit her labor in garden and canning as producing an amount equal to two-thirds the cost of similar

[1] *The Cost of Living on Minnesota Farms*, 1905-1914, by F. W. Peck. Bul. of University of Minnesota.

commercial canned goods.[1] At usual prices for fresh fruits and vegetables, purchase of the materials and home canning usually does not yield much of a money saving; the justification may be found in the home quality. For jellies and preserves, there will be a larger margin.

Effect of children on family food cost.—The costs of rearing children are assessed in various ways upon a family—in one respect, by decreasing the amount per person spent for food as the number of children increase. This appears in the 1901 Federal Cost of Living study[2] which showed that while the total food cost per family increased as the family increased in size yet the money allowance per adult male for food decreased steadily as the number of children per family increased. The family with no children spent $121.01 per year per adult male for food and this amount decreased as the family increased in size, and the family with five children spent $66.16 per adult male; in native and foreign-born families the situation was the same. Measured in percentages of the food cost for the no-child family, the average family with three children spent 71 percent as much per adult male for its food, and the family with five children 54.7 percent as much as the no-child family. Rearing children means a lessened allowance per person for food.

Food economy.—An analysis of factors in family food costs is at the same time an exposition of possibilities in food economy. The housekeeper's problem is to provide the best possible diet at the least necessary cost. The money outgo for food may be controlled in various ways, which may be here presented as market economy, time economy, quantity economy, quality economy, and as food planning and preparation economy in terms of fuel, labor, equipment, and other service factors.

[1] Woodbury, Marion. "Some Canning Costs for 1919." *Journal of Home Economics*, 1920, p. 180.

[2] *18th Rep. U. S. Commissioner of Labor*, 1903. Average cost of food in families of different sizes, per 100 units of food consumption (per adult male). p. 631.

Market economy may depend upon the selection of the place of purchase. Some food stores give a specialized service, and only partly compete with each other, while others compete rather completely. Food markets and prices are subject to caste influences, and in any good-sized community one can choose between stores on the local Broadway or the side street. Similarly, the respect for a high price has led in some stores to marking portions of the same commodity at different prices; or reputation for low price as in cut-price stores will lead sometimes to substituting an inferior quality for a standard grade. In choosing a store one should be on guard against such practices. Cash versus credit, delivery, even the matter of an adequate sales force to give quick service, affect prices.

Market economy may be secured by personal selection of foodstuffs. The much disputed advantages and disadvantages of telephone ordering is of concern here. Like other disputed questions, there is no single answer. It is better to select with one's own eyes when time permits, and to compare prices at different stores, but where personal selection takes time more valuable in other ways, then the telephone should be substituted or the postcard sent the night previous. Where one does buy without personal inspection, it is worth while to establish an understanding with one's dealer as to the quality of goods desired, so that this regularizes one's purchases, as the man learned who had some chops wrapped up to send to his wife and when he said, "Send them to Mrs. D.," the butcher said, "Why didn't you say they were for her? —that's not the quality she uses."

Time economy arises through saving the housewife's time. The organization of one's marketing on a time schedule—a large monthly order of staples, the once-a-week order of minor items, and the buying of green vegetables on the days when they are freshly received, reduces the time required for marketing. For some foods as milk, bread, butter and often for others, a standing order for a quantity to be regularly delivered, is the best mode of purchase.

Seasonal economy may be promoted by a seasonal calendar constructed to give facts as to when foodstuffs are in season in local markets.[1] Such a calendar will list products in alphabetic order and if arranged with columns for the months will give a compact tabular view of seasonal food changes with items such as the following, indicating the extent of the season and its height: "Strawberries, May 15 to June 30, June 5-15."

There is a zest added to the pleasures of the table from the changing supply of the seasons, which the family who buy regardless of time-cost never enjoy. The old restrictions and advantages of seasons are in part done away with by improved transportation, by canning and by cold storage which carry over food for the season of plenty to that of scarcity, as for example April eggs to December. Seasonal restrictions affect the farmer's diet more than the urban family's as in the former custom in the rural South of having fresh meat only in the winter. One who would save by seasonal economy must watch local markets and local prices, take advantage of local gluts which are to the consumer's advantage. Where out-of-season foods come only at greatly advanced prices, they should as a matter of course be avoided by all but the very well-to-do. And in their case the principle that luxury is scarcely defensible is effective.

Quantity marketing creates an economy not only in a percentage reduction per unit on the cost of goods purchased, but also, if rightly conducted, by a saving in time, thought and labor; and yet the decision as to quantity buying must be an individual matter for the housekeeper with regard to different commodities. Among the points to consider in determining its value are: the amount of discount for quantity; difficulties there may be in securing it; the size of the family; storage facilities; the factor of waste and deterioration in connection with domestic storage; the care required to prevent spoilage; and the reaction of a large quantity on hand upon

[1] Terrill, Bertha M. *Household Management*, p. 157.

food waste in cookery and at table. Even the loss of interest on money invested in the food stock is not to be overlooked. Balancing all these factors, there is no question but that the average family is losing at present by not studying quantity economy. Some foods like canned goods can well be bought a year's supply at a time when the necessary money and adequate storage facilities are available. With others like sugar, at least a month's supply is appropriate; and as regards almost all commodities, the heedless manager is losing time and nerve-power, as well as some money, by buying only when driven to it by "the bare cupboard." The device of a marketing list of foods compiled in terms of the food habits of the given family, checked over weekly for the weekly marketing order, would save minutes now wasted in repeated anxious attention to a situation that should be met serenely in a regularly recurring procedure. Quantity purchasing should take account of large-sized containers which may save 25 percent in price per unit of material over the small-sized container.

Quality economy concerns the selection of particular standards of grades of food so as to secure money or dietetic advantage. Is the most expensive the best in flavor and in food value and is it suited to my food standard? The practical issue for each family is to determine in terms of its local markets what qualities or brands it can best buy, and so make the quality decision as far as possible a permanent one requiring no additional attention and hence becoming a more or less automatic matter. Thus with prunes those counting 20-30 to the pound are $\frac{7}{8}$ meat and $\frac{1}{8}$ stone while those of 60-70 size are $1\frac{3}{16}$ meat and $\frac{3}{16}$ stone[1]; therefore if the large size is more than about 10 percent higher in price than the smaller, there is money economy in buying the smaller, provided they are of equally good flavor; one may still choose the larger, more expensive prune but one has the financial problem cleared up. The classic illustration of quality is in the cheaper cuts of meat; thus, round steak as purchased has 21.3 percent of

[1] Cooper, L. F. *How to Cut Food Costs.* Battle Creek, pp. 23-24.

protein and 7.9 percent of fat and yields 694 calories to the pound, while sirloin has 18.9 percent protein and 18 percent fat, and yields 1098 calories to the pound; as a source of protein round steak has the advantage, and as a source of fat and energy sirloin has the advantage—but usually not to the amount of money difference, especially as the calorie advantage of the sirloin turns on the excess of fat which is often rejected at the table.

Price differences measure in part ability to pay on the part of buyers, choicer grades go to those who can pay more; sometimes these preferences of the market have no relation to dietetic value, and are nothing more than whim and local established habit, such as the higher price for brown eggs in Boston and white eggs in New York. The practical rule as regards qualities of food is to be sure that you are getting a real return for what you pay, and that you buy the quality best suited to your needs. The rules of the "best is cheapest," meaning the most expensive is cheapest, and "the cheapest is the best," are both unreliable general guides.

Food wastes.—Pearl estimates that about 20 percent of the energy value of edible food is wasted. The Department of Agriculture estimated in 1917 that the annual food waste in homes was $700,000,000 or an average of about $31 per family per year. This waste was due to:—(1) spoilage caused by careless handling and storing in the home, through exposure to heat, germs, dust, flies and other insects; (2) spoilage by careless cooking, as the undercooked, scorched or poorly seasoned cereal; (3) waste in the preparation, as the unskillful peeling that throws away 20 percent of the edible portion of the potato; (4) table service waste, as in over-generous service and over-eating and (5) garbage waste, as of stale bread, left-over meat, rejected fat, skim and sour milk.

The war-thrift maxims of Waste no food, Let nothing spoil, Don't be finicky about foods, The clean plate, Watch kitchen waste, and a score of others, these are the necessary antidotes to domestic food waste.

That we are careless in our food use when there is no immediate check upon us was conclusively shown by a study of comparative waste in a college table-d'hôte service and in a college cafeteria à la carte service; the total edible food waste in a college dining hall with board paid by the week was 2.61 times as much as it was in the college cafeteria where one paid for dishes as one ate.[1]

As we saw so plainly during the war, food waste also occurs in the producers' hands in transit and in distribution as well as in the kitchen[2] and waste at all these points tends to enhance ultimate costs to consumers even if the immediate direct loss is sometimes borne by producers and the trade.

Greenhouse industries, candy manufacture, soft drinks and the like are sometimes criticized as non-essential or wasteful industries. That they are relatively less essential than milling and baking no one will gainsay. So far as they are non-essential their growth hampers the movement of labor and capital into necessary food industries and hence tends to keep up prices of necessities. Greenhouse products may be valuable for their vitamins.

Cooked food depots.—Theorists have repeatedly suggested that the reform of domestic food economy lies in cooked food depots that will send prepared foods into the home; sometimes the proposal is made for workingmen's families, sometimes for those on moderate or larger incomes. Experiments have been repeatedly made and in America, at least, have almost as repeatedly failed.

Public food kitchens have existed in Europe for generations, usually semi-philanthropic undertakings that provide cooked food either to be eaten on the premises or taken home, for the benefit of the lowest wage-earners. In time of emergency, such service always increases and so during the war central kitchens were established in the warring countries. In England "Na-

[1] Treat, Nola, and Richards, Lenore. "Study of Comparative Waste in a Dining Hall and in a Cafeteria," *Journal of Home Economics,* 1919, p. 542.

[2] Brown, Lucius P. "Partial Analysis of Food Waste Problem." *Journal of Home Economics,* 1917, pp. 503-4.

tional Kitchens" were officially established under the Food Ministry's order of February 25, 1918; but such kitchens had started long before under local authorities or voluntary committees so that by January, 1917, there were more than 60 communal kitchens. The Food Ministry's order authorized loans for local kitchens and by July, 1918, there were about 1000 National Kitchens, including some picturesquely operated upon electric tram cars as a convenient method of distribution. The official directions stated the underlying principle:—"In the conduct of National Kitchens, the aim is to avoid all taint or appearance of charity and to maintain them on a business-like and self-supporting basis." It was also suggested that a self-contained kitchen providing 1000 portions a day, representing a turnover of £40 to £50, could be made self-supporting without voluntary assistance; for such a kitchen, a staff of six was required, the average output being 200 portions per worker until 1200 portions are served, then 300 portions for each additional worker. In larger places a restaurant to serve lunch and dinner was found a most desirable adjunct; in small villages a canteen only was organized for selling foods for outside consumption. An official *Handbook* gave detailed suggestions for equipment, menus, prices, etc.[1]

The English had one pre-war illustration of a very successful central food depot in the Alexandra Trust, London, founded by Sir Thomas Lipton in 1900 with a $500,000 endowment to supply meals for the poorer classes on a self-supporting basis, the prices charged to cover the cost of material, staff, wages, depreciation, etc. In 1914, 5000 meals a day were being served on the premises and 30,000 meals a day for school children were being sent out to 175 Feeding Centers at a cost of 15 shillings per 100 meals.[2]

The history of American experiments in central and co-operative kitchens begins with the Cambridge, Massachusetts,

[1] *Handbook of National Kitchens and Restaurants.* Ministry of Food, London, 1918.

[2] Letter from Alexandra Trust.

cooperative housekeeping enterprise of the late '60's [1] and the end is not yet. The experience up to 1903 was collected by Miss Matthews and it seems a record of high ideals and impractical business methods for achieving them.[2]

In America there were some beginnings of a central kitchen movement during the war, partly as a result of experimental kitchens then under way, and more as a following of European example in war service. In St. Louis a communal kitchen was opened in a factory district by a committee that conducted a cafeteria, sold prepared food on the cash and carry plan, and sent hot lunch supplies into near-by factories. There were many similar plans at least and some initial experiments elsewhere. The Women's Division of the Council of National Defence prepared a valuable report [3] reviewing European experience and the American experiments in selling cooked food, as a basis for establishing food depots, but the war emergency was over before the movement for central kitchens gained any headway in America. One of the most interesting American war kitchens was the Food Economy Kitchen, located near Quincy Market, Boston, which has been continued since the war; it makes up 700 quarts of soup a day, sufficient for 3000 persons, from bones otherwise discarded for food purposes at the public market and also prepares certain other foods as meat loaf, corn pones. Conducted by the local Women's Department of the National Civic Federation it sends out its products in large quantities for school and other lunch rooms, where, in some cases, it is distributed to private homes. It was started as a conservation measure to utilize waste foodstuffs in the discarded bones at the suggestion of a butcher, who felt that some part at least of the potential food in the 50

[1] Peirce, M. F. *Co-operative Housekeeping, What It Is and What It Is Not.* New York, 1886; also, *Atlantic Monthly,* 1868, pp. 513, 682 and 1869, pp. 29, 161.

[2] MS. copy of thesis, University of Illinois. *Co-operative Housekeeping,* M. Alice Matthews, 1903.

[3] *Agencies for the Sale of Cooked Foods without Profit.* A survey of their development with particular reference to their social and economic effect. I. L. Peters. Council of National Defence. Washington, 1919.

tons of bones a day from this large public market should be saved.[1]

Many of the American experiments in cooked food delivery have been started on a cooperative basis; a few as business ventures either of individual women or groups of women. The cooperative ones have succumbed doubtless in part from the attempt to operate a novel business on the novel basis of co-operation. Among the business ventures are a few successful records, the most striking of which is the New England Kitchen, Boston, started in 1890 as a subsidized experimental cooked food depot for the benefit of workingmen's families.[2]

The experimental work of the New England Kitchen successfully standardized the preparation of many dishes and uncovered some of the difficulties of securing patronage for such a depot and of making it self-supporting. Its standard beef-broth and other invalid dishes secured growing patronage from physicians; its sales to low-income working people were supplemented by an increasing demand from those on somewhat larger or moderate incomes, and in the long run it was this group that provided patronage for cooked dishes taken home. A request to undertake a service of public school lunches for Boston High Schools brought the volume of business necessary for success, and the starting of a restaurant in connection with the food depot brought other income and made possible many economies in food handling. The New England Kitchen is now under the permanent business management of the Women's Educational and Industrial Union as a part of its restaurant enterprises, and is a successful restaurant with cooked foods on sale for home consumption. It does not

[1] Dresser, Mrs. Alice, "Food Economy Kitchen, Boston." *Journal of Home Economics*, 1921, pp. 33-35.

[2] *The Story of the New England Kitchen*, two pamphlets. Boston, 1890, 1893.

"Scientific Cooking Studies in the New England Kitchen," E. H. Richards. *Forum*, May, 1893.

Edward Atkinson. *Association for the Advancement of Science*, 39, 1890.

"New England Kitchen," *Journal of Home Economics*, 1913, 362.

"Agencies for Sale of Cooked Foods without Profit." *Op. cit.*, pp. 45-46.

send meals into homes on order but its cooked-food selling service supplements home cooking in many homes or even substitutes for it occasionally most satisfactorily.

A great many cooperative kitchen enterprises appeared in the decade of 1890-1900 stimulated by Bellamy's *Looking Backward*. One at Evanston, Illinois, started hopefully in 1890 with a capital of $5000 furnished by 45 families of means; it delivered hot meals by wagon from a central kitchen, but business miscalculations and dissatisfaction with the service brought it to grief and its record is typical of many other similar experiments.

There is now under way at Evanston, Illinois, an enterprise known as the Alladin Community Kitchen, started by a committee of club women and then organized by them as a business, which for more than a year successfully served hot meals into private homes; then the delivery service was withdrawn and the food salesroom was continued. One problem successfully met was the devising of an improved vacuum food-conveyor and the company now manufactures this appliance for sale. The profit-seeking character of this enterprise has perhaps had to do with its success—for operation at a profit is necessary in any enterprise to secure a working surplus to tide it through experiments, losses, and the unexpected turn in business. Most of the earlier central kitchens starting as an economy enterprise apparently made the mistake of not charging sufficient to pay all costs and losses.

This proposed substitute of a central kitchen for cooking at home is of course attractive to many minds—the privacy of the home table is to be retained, and prepared meals, kept hot or cold as conditions require in insulated containers, are to be quickly transferred to it from sanitary central kitchens presided over by a professional dietitian; and then the after-meal débris is to be as quickly transferred back whence it came—no wonder people wax eloquent over it! But is the plan practicable? It is practicable from a mechanical standpoint and can be made so from a culinary one; but the real difficulty is

the economic one—with incomes as they are, no one but a well-to-do person can supply his table in that way. Raw food materials as bought by the private family cost from one-quarter to one-half of the income; restaurant prices are necessarily three or more times the cost of raw food; costs in a central food kitchen for workingmen will be probably two or three times the cost of raw foods, and in one operated with delivery to the purchaser's home still more. No family can multiply its present food cost by two or three except the family with a very large income, or the family in which as much is paid for service in connection with food as the raw foods themselves cost, so that an outside prepared food service saves hired home service. In other words, it will ordinarily be economically impossible for a family on an income that requires even one-quarter of its money for raw food materials to meet the necessary expenses for a cooked food service. Even in school-lunch self-service cafeterias, where there is no charge for rental and service is reduced to a minimum, raw food costs are multiplied by two to give the selling prices that will meet necessary costs.

Commercial cooked foods.—There are commercial enterprises which provide cooked foods for the home, including the canning industry, the bakery, the delicatessen.

The delicatessen store for 50 years has been successfully supplementing the home preparation of meats, salads, and baked stuffs as a first aid to the city housekeeper, and modern grocery stores carry cooked meats in response to a demand discovered by these stores. Here and there a restaurant has built up an outside food sale service. A cafeteria in an eastern city was recently inaugurated with two services, the usual cafeteria service of meals on the premises, and a take-home service of cooked dishes. Such enterprises are to be encouraged, although they are often attacked as tending to break down the home, and in some cases they doubtless may be so interpreted. It seems fairer, however, to accept these services when they meet a real need, and to see to it that they function properly. The delicatessen danger is not in its possible contribution to

family instability, but in the evidently inadequate meals that may result, when delicatessen food is relied upon exclusively, and is not supplemented by hot cereals, leafy vegetables, fresh fruit, and milk.

Canned foods have added variety to the workingman's winter diet, and by distributing the year-round food supply have favorably affected prices. The canning output varies from year to year, but is growing. In 1919-20 American canneries produced over 21,000,000 cases of peas as compared with 9,375,000 cases in 1909-10; 28,590,000 cases of corn as compared with 15,850,000; and 22,177,660 crates of tomatoes as compared with 20,219,000; that is, canned peas had more than doubled, corn had nearly doubled and tomatoes had increased about 10 percent in the ten year period.[1] The canning industry increased its total product in these three staples by 58 percent, while population increased 15.8 percent.

The bakery trade is also developing more rapidly than population. In the five years 1909 to 1914, while population grew 8 percent, the number of bakeries also increased 8 percent, but the number employed in the industry increased by 19 percent and the value of the product of the industry by 51 percent.

Summary.—Food works social as well as physical results in family life; the family table helps bind in a permanent union those who eat about it. Modern knowledge is basing food choice more and more on nutritional values rather than on local food production or racial and family custom. Food choice is good when the day's diet is ample for energy requirements, and when protein food, ash constituents, and vitamin-carrying foods are properly represented. A varied diet with ample use of milk and of fresh fruits and vegetables (including leafy varieties) is a guarantee of adequacy. Less money should be spent for meats and sweets, and more for milk, vegetables and fruit.

Food requirements and hence costs vary chiefly with age,

[1] American Canners Association, Washington.

bodily size, and activity. In approximate terms, food cost varies at present from about 30 cents to $1.50 or more per person per day, or from 40 cents to $2 per day for the food required by the adult man. On the minimum level food costs 30 cents per person per day and foods represent about 45 percent of the total expenditure of a family of five. On the comfort level ($1800-$2500) food costs 40 cents per person per day and is about 35-40 percent of the whole budget. On the moderate level ($3000-$5000) food costs 60-90 cents per capita or from 30 to 25 percent of income. On the liberal level of $10,000 or more, food costs may go from 90 cents to $1.50 or more per capita, and represent probably 25 to 20 percent or less.

Food economy as well as good nutrition is provided by choice properly balanced between the different food groups; pecuniary economy is also achieved by attention to the selection, marketing, storage, preparation and service of meals. By these domestic economies and the contributed labor of the housewife the home kitchen is destined to hold its own indefinitely against the central food depot; and whenever that agency proves its economic practicability the home table will doubtless remain although served by food from outside.

CHAPTER IX

SOCIAL ASPECTS OF FOOD SUPPLY

Production and Markets

Social control.—There is a process of social control regarding foods, industrial at basis but in part educational, and in part legal and governmental, which has for its purpose the production and consumption of food of proper quality and in adequate quantity. The necessity of such social control of food production and food consumption lies in the fact that where once a man produced what he consumed and was his own guarantee of food quality, now what one man produces another man consumes and in between a thousand men and agencies and conditions may operate to qualify the product finally delivered on the table. But food is vital to the individual and to society, and society has very naturally developed a conscious system of food control.

Food is a store of wealth and a security for the family and for the community to an extent that modern Americans can hardly appreciate. National food reserves, held back by producers or in storage, become preeminently important during war and in years of crop failure. In the war, for two years, our reserves were the chief source of increased food shipments to Europe, and in 1917-18, our exports decreased because our reserves had been used up.[1] The importance of food reserves, in evening up food supplies between fat and lean years of food production and in maintaining our standards of living is obvious when one considers the situation in China or India where each year's consumption largely uses up that year's food production and famine is always at the door.

[1] Pearl, Raymond. *"The Nation's Food."* *Op. cit.*, p. 146.

If society's interests are involved in the family food what is society doing about it? This chapter will present the various social agencies that have to do with the food supply, including the relation of government to food industries and food consumption, and will especially discuss food production and food marketing. But first the social agencies that control individual food use will be mentioned.

Racial and national usage exerts a powerful control over individual food habits. Such national food habits are the outcome of age-long food supply as determined by soil, climate, native plants, and animals. The Esquimaux live largely on meat; Southern China gives a certain grain an important place in the diet, Europe uses another grain, and each race has settled down to animal food or to rice or to wheat until usage has become second nature. But these combinations of a principal food and supplementary foods wrought out in a race's past, are bound to experience change under modern influence of migration and commerce. Migrating people take their food habits with them to modify those among which they come and to be modified by the food customs which they find in the new land.

Commerce or exchange of foodstuffs between districts within a nation and between different nations largely determines any community's food supply. A nation like England depends on sea-borne foods. The tropical banana, now so largely used in the North, world markets for grains, the internationalizing of the meat trade, the breakfast table with its foodstuffs from a half-dozen distant points, the grocery store in a New York dairy county having on sale Australian butter because all local milk goes to the city, these are evidence of the place of commerce in the food supply.

Modern manufacturing industry has developed entirely new aspects of the food supply not only by new methods and marketing, and by changing old foods into new forms as by changing milk into condensed, evaporated, and dried products, but also by deriving new products from foods such as

sugar of milk and cheese of a hundred different types, and even by securing products that seem alien to their foodstuff origin as buttons from the casein of milk, the economic value of which as a by-product may nevertheless be one of the essential controls in food supply. Miller and baker and village butcher were formerly the chief food manufacturers but now perhaps there are engaged in the manufacture of food a tenth as many persons as there are in its original production.

The general progress of science has contributed in unexpected ways to control the food supply. Thus bacteriology has given us standard tests of cleanliness of milk, and pasteurization and cooling as methods of preserving milk. Mechanical invention has given us the labor-saving machines of the farm which more than anything else account for the drift from country to city (since fewer people are needed to produce when machinery is used), and has helped make possible rising standards of living for larger urban populations. Social experiment and science have given us among other things the recent development of cooperation in agriculture, which provides for example in the dairy industry, breeding associations for improving dairy stock, milk marketing associations and cooperative creameries, and these are true causes of increased food supplies.

Education as a method of social control of the food supply includes: the far-reaching system of agricultural education, with its schools, colleges and extension work to reach the individual farmer with better practice in food production and marketing; including research and advanced instruction in these subjects. Important especially is the education of the consumer through the parallel organization of home economics education in the elementary schools, high schools, colleges and extension work. Continuation classes in marketing and in foods are being provided for the young woman and young matron, in short courses, for example, six lessons on planning menus and marketing, six on buying meats, and other units on other problems of buying and food preparation for

the home. Professional courses in buying are increasingly given in higher institutions, to train the teacher of marketing, and institutional purveyor, and from these courses may come in time trained managers for cooperative clubs and stores; these courses give attention to the economic, legal, and sanitary, as well as the practical aspects of marketing. In one state, New York, there are special teachers of nutrition organized under a state supervisor of nutrition working to remedy defects of school children due to malnutrition. This same goal is sought by many social agencies using educational methods.

Research in foods is yielding some of the most important elements of our food-control system. The unique qualities of milk as food have been developed by the researches of McCollum, Mendel, and others; and special food research centers have been established such as the Carnegie Nutrition Laboratory at Boston, the Lewis Ross Fund at Rochester University, the new Food Research Institute at Leland Stanford Junior University.

Medical advisers recognize diet as a most important factor in health and disease, and medical colleges provide instruction and research in nutrition. The nurse, the doctor's right hand man, studies dietetics as a regular element in her training and teaches proper food use in her private practice and in her work as school nurse, industrial nurse, visiting nurse, and in other fields. The scientific dietitian is an indispensable factor in a modern hospital and nutrition clinic.

Social work with families by charity organizations is stressing food work by utilizing the dietitian. Child-welfare work, infant-welfare work and the like is, more than any other one thing, a crusade to secure the eating of suitable food by children. The clown Chow-Chow, the Food Fairies, the growing wealth of teaching material regarding food, as posters, slides, films, charts, plays and pageants, the school's requirement as in Rochester that every child below weight must have milk in school every day; nutrition centers for children and

follow-up work right into the home to convert father and mother to better food habits for the children—these manifest the social will that the child must not only talk about food, but must actually acquire good food habits and drink his three glasses of milk a day. The fight against tuberculosis must be waged in good part by the nutrition worker, and even dental defects it has just been shown may be really nutritional defects.[1]

The appearance of the professional worker is always an evidence that important issues are involved, hence the skilled and professional workers of various types related to food attest its social significance. Such workers include the specialized research worker in nutrition, advanced nutrition teachers in universities and other higher institutions, medical food specialists, dietitians, nutrition social workers, specialists in food production, manufacturing, and in marketing. The food faddist and the food fakir who sells fraudulent food advice, present the testimony of imitation to the fact that food is a professionalized field.

A sound literature is competent testimony to a social movement, and society's interest in food is evidenced by a remarkable body of scientific literature on food, including among many others, the researches of von Liebig, Voit, Rubner, and in America of such investigators as Atwater, Lusk, Mendel, McCollum, Sherman, and the working over of the results of scientific research into educational books by Ellen H. Richards, Mary Swartz Rose and others, and into the popular material of the Department of Agriculture, of the state colleges, and of various nutrition and social agencies.

There are also other social influences making for better food selection. School lunches and the educational work in connection therewith; the interest of employers in the physical efficiency of workers, expressed in industrial lunch rooms and consultation service with employees; the beginnings of en-

[1] See *Nutrition Bibliography*, published by New York Nutrition Council, Health Service, Red Cross, New York City, 1921.

lightenment among food purveyors in public restaurants; progress in institution kitchens such as hospitals and the like; the relatively high standards of the Army and Navy commissaries during the war; the public library with its books on food and its reference librarian ready to find an answer, if she does not know already as to whether "goat's milk is good for the baby"; the "pure food exhibition" with all its raw commercialism which could be improved 100 percent in educational efficiency; the occasional food education exhibit of our museums that should be duplicated with changing exhibits in every community where there is a museum—these are some of the social forces already marshaled in the fight for intelligent food selection in the family.

There are certain general government policies that directly affect the food situation and some of them have been adopted because of their bearing on the food supply. Tariff rates on foodstuffs, whether high or low, will affect food imports. Tariff rates on other commodities so far as they increase the exportation of manufactured goods will tend to increase food imports to pay for our exports. The opening of public lands has tended to increase domestic food production and serve as a check on food prices. Land reclamation to-day exerts the same influence though its relative importance is of course less. Another important policy is making capital accessible for farming through the Federal Farm Loan System, which provides a national and indeed international market for American farm loans. An imperative need is a system of short-time loans for the annual outlays for productive purposes which are recouped only months later when crops or animals are marketed —a longer loan than the usual commercial loan.

Government agencies that directly concern the food supply are the most striking proof of its socialization; these, including federal, state, and municipal activities, will be presented in detail.

Government and food production.—The federal government's system of scientific research and education in agricul-

ture, radiating to every state college and agricultural experiment station from the United States Agricultural Department at Washington, aims to increase food production both in quantity and quality, and to help consumers. Its investigators are improving methods of plant and animal husbandry; its agents are ransacking the corners of the world for new products or new varieties of old products. Special drought-resisting varieties of wheat are made available for dry areas; the citrous fruit canker in Florida is routed by a campaign that requires men and millions; special hog nursery houses are designed to reduce hog infant mortality; feeding experts devise a diet that will produce the most meat at the least cost. Inside the government service and out, but under government leadership, science is organized to produce more and better foodstuffs, as it is applied in no other human occupation, except possibly in the private research departments of manufacturing industry, and here it has been urged that there should also be unified government leadership in industrial research. There is thoughtless objection sometimes because government research does so much for hogs or wheat, and so little for human beings. The reply is, that this scientific work in agriculture is all for the benefit of human beings who use food products. The government concerns itself also with manufacturing industries that elaborate food products, with certain aspects of food transportation, with its marketing, and finally with its relation to the consumer, and the consumer is an ultimate beneficiary of all that the government does for food production since it all tends to give a better variety of food and a better price.

Under the Meat Inspection Law the federal government inspects all meat products that are to enter interstate commerce.

By the Federal Pure Food Law (1906) the government's aim is to see, as Sherman[1] says, that food shall be: (1) What it purports to be, in kind and amount, (2) free from deterioration or unwholesome additions, and (3) possessed of its full

[1] Sherman, H. C. *Food Products*, p. 26.

nutritive value; and it seeks these objects by forbidding adulteration and misbranding of food which enters interstate commerce. Food is "adulterated" if it has been damaged or rendered inferior as by mixing a substance with it, by substituting another substance, by abstracting any valuable constituent, by treating so as to conceal inferiority, by adding a poisonous or deleterious substance, or if it consists of any substance unfit for food. Food is "misbranded" if the package or label bears a false or misleading statement or device or is false branded as to its place of manufacture, if it is the imitation of or offered for sale under the distinctive name of another article, or if it is labeled or branded so as to deceive the purchaser. If the foods are in package form they are misbranded if the quantity of the contents is not marked in terms of weight, measure or numerical count, or if the package or its label shall bear any statement regarding the ingredients which shall be false or misleading. Similar pure food laws have also been developed by the states to control food products manufactured within a state for consumption within that state, but their lack of uniformity with Federal food standards has led to the recommendation that uniform Federal control be extended over the whole field, intrastate, as well as interstate.

The United States Warehouse Act administered by the Department of Agriculture is designed to encourage the warehousing of grain, flax seed, cotton, wool and tobacco, which have been graded according to standards set up by this Department which licenses and bonds the warehouses and their operation under government inspection.

The Packers and Stock Yards Act (1921) placed the interstate enterprises in this field under the supervision of the Department of Agriculture, somewhat as railroads and public service companies are under government supervision as to services and rates. Complaints as to commission rates for selling and as to prices charged for products will be investigated and supervision given as needed.

The Bureau of Markets, United States Department of Agriculture, studies the wholesale and retail marketing of agricultural products and its publications include periodical market reports, daily, weekly or monthly as the case may require, of market conditions, receipts, demand, prices, etc., for such commodities as dairy, live stock, and meats. This comprehensive and unprejudiced collection of market facts is the most essential service which a government market service for foodstuffs could perform. It already employs thousands of voluntary crop reporters to gather facts and the wireless, the telephone, the mail, the press and other agencies to distribute market intelligence rapidly. The forms of marketing organizations for producers, cooperative and otherwise, the grading or standardization of food products of various kinds, the technique of shipping, the organization and administration of city markets, are among the problems studied by the Federal Bureau of Markets. The Bureau of Markets among other services has suggested standard laws for adoption by the individual states, including a state law for cooperative organization, a law to establish a division of marketing in any state, and a law for cooperative credit associations or credit unions. This proposal of standardized state legislation is a particularly useful national service.

A recent enterprise of the United States Bureau of Markets is the standardization of market containers for foodstuffs. The Bureau found in common use 40 sizes of cabbage crates, 20 styles of celery crates, 30 lettuce crates or boxes, etc. This wide variety makes for misunderstanding if not outright deceit, for inconvenience in packing and in shipping, for greater expense in manufacturing unnecessary styles and sizes, and these losses constitute an unnecessary tax on the fruit and vegetable industry, thus preventing a fair deal all around. Federal laws have established standard barrels for fruits, vegetables and cranberries (1915) and standards for grape baskets, berry baskets and small till baskets (1916), with a bill before Congress to provide standards for three other

important containers—the round stave basket, the hamper and the splint or market basket.[1]

In the individual states there are generally state officers or bureaus that have to do with food control, such as the state departments of agriculture, foods, markets, weights and measures. "An official state marketing service" charged with carrying out regulatory or investigational work in marketing farm products was reported in 1920 in the following states: Alabama, California, Idaho, Kentucky, Maine, Michigan, Minnesota, New Jersey, New York, North Carolina, Oregon, South Carolina, Texas, Vermont, Virginia and West Virginia, with legislation then pending in several other states. New York, until recently, had a large State Department of Farms and Markets with a Division of Agriculture, and a Division of Foods and Markets, the former including Bureaus of Plant Industry, Animal Industry, State Institution Farms, Farm Settlement, Dairy Products and Statistics. The latter had Bureaus of Markets and Storage, Cooperative Associations, Licenses, Weights and Measures, Food Products, and Food Standardization.

The states have other agencies concerned with the food supply, such as state agricultural colleges, agricultural experiment stations, which are cooperative enterprises between the federal and state governments, state health department, etc. City health departments also usually oversee local food supplies, especially milk, fruits, meats. Food stores and public eating places may be under their special inspection. The city may itself provide public food markets, both wholesale and retail, farmers markets, etc., and in some cities there are municipal abattoirs. Such marketing facilities may include public storage of foodstuffs for food merchants and, as arranged by one or two cities, for the consumer as well.

Gradually these public agencies are improving our food markets. For example, a proposed reform is the selling of all

[1] Farmers Bulletin 1196, U. S. Department of Agriculture. *Standard Containers for Fruits and Vegetables.* 1921.

foods by weight which is being promoted by the market commissions; all vegetables and fruits, now sold by capacity measure, it is urged, may better be sold by weight.[1] The requirement of a label on all foods giving net weight or count of contents was only recently secured. There has been a proposal by Lusk that all food containers should also carry food description labels stating the food value in calories and possibly other facts as to nutritional values.

Food production and marketing.—The household as user of food is interested in the improvement of food production and distribution so that the consumer will find a cheaper and better supply in the retail market. This may turn upon any of many different factors that reach back through the marketing process, including food production, grading, transportation, wholesaling, storage, retailing. Each of these may well be examined.

Food production.—Every item of progress in the original food production industries brings a benefit to the ultimate consumer, which in some cases is directly evident as in a larger production relative to population, an increase in varieties, an improvement in quality of product, or the grading of products so that market prices can vary according to real differences in desirability.

The original producer's food cost includes: the expenditure for farm labor and management and for capital costs of the investment in seed, fertilizers, machinery, and all other advances made; this capital cost can be estimated at an annual cost equal to (a) the interest on capital tied up in the materials and processes and (b) a replacement fund to make good in whole or in part as necessary [2] the capital goods used

[1] Bailey, E. H. S. "Weight Standards in Handling Food Products." *Journal of Home Economics.* 1919, p. 312.

[2] In counting elements in food cost to consumers no allowance is to be made for farm rents since they are paid for on any given farm out of its excess product as compared with less productive farms. The products of all the farms go into the market at the same price per unit of product; and this price must be enough to compensate the farmer on the least fertile or advantageously located farm, that is, the least productive farms, the product of

up or their depreciation in value through the year's use. Even losses in bad crops due to weather, disease, etc., tend to be ultimately borne by consumers since the producer must get a sufficient average price to cover all his outgoes, and must make up his loss in one year by gains another year.

Whatever reduces any of the costs in agriculture, or other food production, whether by better seeds, fertilizers, tools, machinery, skill in labor or management, by direct reduction of waste, or by cheaper capital, is a benefit to the consumer. Hence the whole movement for agricultural science and education, for invention of labor-saving machinery for the farm, for farm credit, and for all farming improvements, merits and should have the support of city people as well as rural, and should make a direct appeal to the housekeepers of the nation. A better feeding ration for cattle will register itself on the scale pans of the butcher shop and reduce the toll of the kitchen garbage pail. New varieties of wheat broaden the grain belt and help prevent a rise in breadstuffs.

Producers associations for exchange of information; agricultural expositions and local fairs; agricultural papers, some general, some specialized to a single product as milk, and recently marketing organizations of producers that study market conditions, standardize products and often take over the distribution of products, are some of the producers' activities in this field. Progress in the technical efficiency of agriculture has thus far in our history, next to occupation of new lands, been the great means of keeping food prices fairly uniform despite the rapid growth of our urban non-food-producing population. This technical progress in agriculture must be depended upon even more in the future since our best lands are now appropriated.

Wholesale functions.—For foodstuffs to move from individual producers, economy demands that they be concentrated

which is demanded in the market. Those on more fertile and better located farms thereby make an extra profit, and under competition the commercial rent charge tends to equal this particular extra profit or "economic rent."

into large quantities for handling, grading, shipping, storing, and then later broken up into smaller quantities and ultimately into the small quantity that the consumer desires. The dealer serving the consumer is called a retailer, all others may be called wholesalers. The function of all these wholesaling middlemen has been described as overcoming four maladjustments in production and consumption, namely, as regards time, place, quantity and quality. To transfer the precise quantity of a food commodity, of the exact quality desired, into the hands of an individual consumer at the certain point where needed, and at the definite time desired, and to meet all these four conditions without fail for commodities coming from producers all over the world and moving into the kitchens of 22 million families and numerous larger housekeeping units—here, there is real work to do. It involves shipping, storage, grading, assembling, dispersing, packing, and many other skilled services of many "middlemen," with appropriate investment and skilled management in all these stages.

Almost every popular discussion of marketing centers around the slogan "eliminate the middleman," for the average person does not readily see that these handlers of food are as necessary and hence as productive as the farmers themselves. The same specialization that makes factory industry efficient, manifests itself in particularized marketing tasks—such as those of the firm that handles car lots of certain foods, the firm that buys and performs a grading service for eggs, the firm that specializes in a certain type of goods and acquires knowledge necessary for skillful services. Even the firm that does nothing but "print" butter from tub form into pound parcels may justify itself. Who shall say off-hand that a marketing organization is uneconomic simply because there are many functionaries in it? Business men are always seeking cheaper ways and the assumption favors the efficiency of existing methods until more economical ways are devised.

It is significant that our first careful study of a local food-market tends to justify the general situation as it is while

pointing out the ways of betterment as by an improved terminal market and other progressive changes, some of which are already under way.[1] This point of view is one which housekeepers may wisely adopt—that our present market system has grown up to meet actual needs, that while duplications and archaic types of organization can always be found, the competitive system is in process of eliminating them and more economic types of organization are on the way to be realized. Society can help in hastening these changes, and to secure some of them social action may be indeed necessary. The need is not, however, for municipal-owned and operated markets, since government in business does not add to efficiency. The need is for public cooperation to secure adequate physical accommodations for wholesale food markets at railroad and ship terminals, and public supervision of the public's interests in those vital food-trades as far as circumstances now or later may require. Just what tendencies in wholesale market organization may be commended as likely to give real progress?

A centralized wholesale food market at the city freight terminals is the one great need in large cities. This means adequate space for unloading freight cars and ships; display rooms and storage (dry and cold and warm) for all current supplies and for considerable reserves, located immediately at hand. There must be accommodations for food firms and working areas for handling foods, for breaking up consignments, sorting and reassembling and for loading outgoing freight as well as receiving incoming freight, since the modern city's food market is an exchange for neighboring sections of the country as well as the means of feeding its own people. There should be mechanical equipment for overhead carriage, elevators to store rooms above and below, trackage for freight trains and areas for trucks; auction rooms for selling produce and meeting rooms for boards of trade in various food lines—these are some of the physical characteristics of a city food terminal market as it has often been sketched but not yet fully realized

[1] Nourse, E. G. *The Chicago Produce Market.* Houghton Mifflin, 1918.

in any city. The typical wholesale market at present is a row of stores, poorly located often as regards railroads and docks, and poorly equipped, the inheritance of an earlier day, and to-day the greatest obstacle to cheaper wholesaling in our cities. No one person can provide a modern terminal market; the plans should be made for it cooperatively by the city, the railroads and the food trades; and if the city go no further than to give leadership and later supervision as needed, it will be well, thus leaving this modern industrial agency to the industries concerned.

Another great force for progress in wholesaling is the commercial organizations or boards of trade in the various food trades. They should be recognized by law and encouraged by the public marketing authority to take increased supervisory control over those who are to have the advantages of the city-organized wholesale market, much as the stock exchange supervises trading in securities. Such organizations can be effective in eradicating the occasional dishonest commission merchant whom the laws of several states are trying to reach by a public licensing system and by supervision by a state marketing commission.

Another marked tendency in the wholesale market is the integration of firms into larger trading units. Chain stores which do their own wholesaling, organizations of retail stores into cooperative buying associations, growers associations as the citrus fruit exchanges, and the meat packers, are examples. Where real economies are effected by forming larger trading units, they are socially desirable; where the larger unit does not reduce costs but simply represents centralized or monopoly power that can be used to crush competition and acquire extra profits that are not passed on to consumers, integration may be anti-social. Dr. Haney has suggested that integration may be socially desirable for commodities that have one or more of the following characteristics: (1) heavy but not excessive advertising expense, (2) concentrated production or consumption, (3) requiring special "service," e.g., sewing machines,

(4) aggregated in interrelated groups, (5) subject to highly standardized marketing technique (e.g. milk).[1] Integration should mean elimination of "middlemen," but the services rendered under the old functionaries remain to be done. Haney cites the illustration of mail-order handling of groceries which costs 22 percent for the services formerly rendered by wholesalers and retailers, practically the same as in usual trade channels.

Improved organization is often secured as wholesale functions that naturally follow each other are consolidated; thus, growers associations may undertake grading, shipping and selling to the local wholesale trade. The citrus fruit exchanges are the best working example of this, although the "United States Grain Growers, Inc.," a farmers' organization formed in 1921 to undertake the marketing of grain is in its plans the most far-reaching enterprise in this field. Local wholesale food firms may establish branch houses in other cities where their trade reaches and thus one company carry food through successive stages of transportation and sale; retail stores may form an association and thus reach back into the wholesale trade.

Consolidation is called for whenever such typical conditions are found as losses through carting goods back and forth when the business could be conducted at one point and covered by a single profit; deterioration by rehandling; sorting and grading done in a city which might be done in the country more cheaply. Consolidation throws business into the corporate form and as corporations increase in size there is an increasing loss of efficiency in the added supervision needed. Much of the food wholesaling is done at present by individuals and partnerships in which owners work and themselves supervise their business, a very effective business method. Consolidation may, therefore, lose through uneconomic methods what it gains by eliminating duplication.

[1] Haney, L. H. "Integration in Marketing." *American Economic Review*, Sept., 1920, p. 544.

Grading of food products.—Control of food quality is being sought by establishing standard grades for certain food products, which are put into effect in some cases by the government itself as in the case of wheat, and in some cases for example canned goods by agreements among producers. A good example is the grades for fluid milk adopted by the Commission on Milk Standards which aim to supersede standards of the individual states by a uniform standard of not less than 3.25 percent milk fat and 8.5 percent of non-fat solids; the Commission has also recommended a grading of market milk into grades A, B and C based on sanitary standards in production and bacteriological tests of the milk produced.

Another interesting example of market standards is the United States grades for potatoes [1] first required by the Food Administration in 1917. When the requirement was canceled after the Armistice the use of grades was to a large extent continued voluntarily. Three grades are recognized. United States Grade Fancy "shall consist of sound potatoes of one variety which are mature, bright, smooth, well shaped, free from dirt, frost injury," etc., the range in size shall be stated in terms of a maximum and minimum diameter or weight, as "United States Fancy 2 to 3½ inches," but in no case shall the diameter be less than 2 inches. United States Grade No. 1 shall consist of sound potatoes, the diameter of the round varieties to be not less than 1⅞ inches and of long varieties not less than 1¾ inches. United States Grade No. 2 shall be not less than 1½ inches in diameter.

The grading of foodstuffs, as of other products as cotton, hides, metals, lumber, provides standards by which they are judged when purchased from producers and when bought and sold in the trade. Standard commodities can be stored and the warehouse certificates issued become negotiable, since the quality as well as quantity is guaranteed, thus, financial and trading operations are greatly facilitated by the use of grades.

[1] U. S. Department of Agriculture, Department Circular 96.

Grading leads the producer to use more care so as to produce as much prime quality as is possible; at any rate, grading gets him a larger net price, since he secures for each grade what it is worth and does not have the price of his whole product scaled down because it is of mixed and uncertain quality. Wholesale buying and selling at a distance is possible with graded products, hence markets are widened. Organized exchanges with dealings in futures arise with a consequent more just interaction of supply and demand and a fairer price. Grades were promoted at first by dealers associations, then by growers associations which are at present most active in securing their adoption. They are recognized as a suitable matter for government supervision since they are a type of weights and measures control. The consumer is a direct beneficiary when buying standardized or graded goods; and indirectly he benefits from all the economies in handling and financing which standards make possible. When the producer classifies prunes by the number in a pound he gives a basis for retail price gradations so that the well-to-do purchaser buys the more expensive grade and makes possible a product at a lower price for the family on a narrower income. The prospect is that consumers will ultimately buy all foods and other products as well in terms of standardized grades. Then, for example, a postcard order for No. 1 lettuce would bring the housewife practically a standard product.

Grades exist rather generally in wholesale trade; for example there are said to be 105 grades of poultry in the Boston wholesale market. Grades need to be made uniform throughout the country, observed by producers and packers, carried over into retail trade, and made intelligible to consumers as the basis of their choices. Such standards fully established would tend to make marketing an exact, partially automatic and efficient art.[1]

Branding.—The branding or identification of goods by

[1] Snyder, F. S. "The Grading and Standardizing of Food Supplies." *Journal of Home Economics*, 1915, p. 150.

names, brands or trade-marks is a producer's and wholesaler's practice which has greatly increased, particularly with goods for retail markets. Identification of goods, with advertising campaigns to make the brands known to consumers, may be a cause of social losses, as where two brands of cereals may be pushed by extensive advertising campaigns, each priced exorbitantly and the consumer bound to pay the cost of his undoing whichever brand he buys. Brands may be, however, a socially useful method of getting and holding trade, since the identification allows the consumer to judge the product, rejecting one that does not come up to its pretensions and continuing to favor the product that gives the most for the money. This may prove a more effective check on dishonesty than government supervision could be. Manufacturers often use brands as ways of tying different parts of the trade together and then by appealing to consumers by general advertising try to bind retail trade to their product. Also wholesalers may create brands, as with canned goods, for inasmuch as the product of one cannery may vary in quality from year to year, a wholesaler's "best" brand may be secured one year from one section and another year elsewhere in order each year to have prime quality.

The consumer should study the brand problem in his own buying. There are shameless cases of exploitation based on brands, but brands on the whole can be used to advantage. One safe rule is not to pay more for branded goods than for unbranded goods of about the same quality. It need cost little if any more to produce branded goods than unbranded and unless this manufacturer can give you better service for your money, why patronize him despite his advertising patter about superior quality. But having found a branded commodity at a reasonable price that has made good, reward the just manufacturer with your permanent trade.

Brands make possible successful national advertising campaigns, since an advertisement displayed throughout the country presumably calls attention to a commodity that can be

bought anywhere and identified by some mark. But brands may be used simply as fighting devices, without regard to consumers' interests; thus a retailer's dress brand was announced in the trade in 1921, which was to be promoted and advertised nationally as a trade name by an organization to be composed of one store in a place, but under this brand any local dealer might handle any line of dresses he desired, to be bought anywhere he wished to buy them. Such a plan would give opportunity certainly for wide variations in the grades sold in different towns but under a common name.

Brands are the vehicle of "price-maintenance" efforts by manufacturers who put out a "standardized product" to be sold at a "standardized price" which the retailer cannot alter. There has been much propaganda to make consumers feel that standardized prices are to their interest; the facts seem to be the other way. The Supreme Court has declared it illegal for manufacturers of patented goods to stipulate fixed resale prices as part of their patent control of a product. The consumer is interested because a controlled retail price tends to be a high price, high enough to meet costs of retailing in the most expensive market; whereas retailing costs tend to vary in different markets and competition tends to reduce these costs, and consumers have a right to benefit thereby. The unstandardized price should be generally lower than a standardized price for a similar type of quality.

Transportation.—Transportation affects the food market by its adequacy, its efficiency, its costs. The continued development of steamship and steam railroad lines is needed but especially the gridironing of rural districts with improved roads, and as far as possible with trolley lines and with auto truck routes which have become important gathering and distributing routes for food and other household necessities. The interurban trolleys which furnish produce to Indianapolis and other cities, and the Reading Railroad which delivers to suburban towns purchases made in the Reading Terminal Market, Philadelphia, suggests two ways in which transportation

may directly affect marketing. Water transportation in some places could greatly aid the local food markets. What a factor food transportation has become is evident when one considers imported foods such as coffee, or narrowly localized food products such as the citrus fruits which are used in every hamlet no matter how remote. Up to 1842 all milk used in New York City came in by wagon; in that year the first milk was sent in by train, a distance of 75 miles, by an enterprising dairyman; by 1870 several railroads were bringing in milk, but it all came from within a 100-mile radius; by 1890, milk was coming from a 175-mile radius, and by 1910 from other points over 300 miles away.[1] Recently it was estimated that the general food supply of New York is brought by rail an average haul of 1000 miles.

The efficiency of food transportation and storage is improving thanks largely to studies made by the Federal Department of Agriculture. Its investigations discovered the pre-cooling method of preparing fruit and vegetables for transportation which have made possible practically wasteless shipments. Pre-cooling with continuous low temperatures in transportation and storage, by using chilled cars, warehouses, and, it is recommended, cooled trucks even, extend the time and enlarge the area in which perishable foods can be shipped; hence our year-round fruits and vegetables, and the shipping of meats from one hemisphere to another. Manufacturing technique, as in perfecting and cheapening dried milk, or in dehydrating vegetables, may entirely alter the transportation problem.

As regards transportation, the government's control of interstate commerce gives it supervision of railroad freight and express service and the rates therefor, and these have been decisive factors in the development of new food sections and interests, as, for instance, in the successive wheat belts opened across the continent, the shipping of flour versus the shipping of unmilled wheat abroad, the Florida and California citrus fruit industries. Government supervision has made it possible

[1] Farmers Bulletin, No. 177. U. S. Department of Agriculture.

for shippers to receive a hearing of their grievances. The opening of the Government Parcel Post to food carriage and especially reorganization of express rates have helped producer and consumer, but more through the usual trade channels than by direct shipments from producer to consumer. The amount of direct shipments must always be relatively small, since the amounts to be moved are so large that they must travel primarily in car lots which will be broken up close to the ultimate consumer.

The auto truck is a large factor with producers in moving goods to market—its saving of time by moving from field to city market without rehandling, is as important as the size of the load it carries. Some vegetable growers run their own products 50 miles into New York by what is in effect a private auto express line. Trucks had so supplanted railroad handling for short distances in New England that the railroads made new low rates recently in a definite effort to recover business. The handling of foodstuffs within cities is greatly expedited by the truck; it reorganizes the city market—for the retail dealer who used to go as an individual to wholesale markets at dawn, finds that market extended to his very door, in Chicago at least, by the "truck-jobber" who executes and delivers produce orders to the retail stores which the dealers need no longer leave.

Improved local transportation of foodstuffs, into and within cities, is a most urgent need, that should have the attention of state transportation commissions, city governments, and local commercial and consumers' organizations. There may be a boat line, trolley line, or auto-bus route on which produce shipments could be stimulated.

While transportation cost is a relatively small fraction of food costs, such costs have risen steeply, and since transportation is a universal cost affecting all foodstuffs, whatever can be done to cheapen it is an important economy. Some relatively new devices for cheapening transportation are :(1) the "storage-in-transit" privilege which permits a shipper to send

goods to an intermediate point and place them in storage there, paying the freight that far; then at a later date have them resume their journey to a predetermined point farther on, at a total cost no more than had an original through shipment been made; and (2) a somewhat similar arrangement is the "concentration rate," whereby parts of a carload of produce are shipped to an assembling point and there forwarded at carload rates to the wholesale market. (3) Another great aid is the practice of "diverting" car shipments at junction points, whereby a carload of oranges on the way east may have its destination undetermined until it reaches Kansas City, when market conditions may lead the shipper to divert it toward Chicago, and later as it reaches St. Louis a telegram may again divert it to Indianapolis or Cincinnati or Detroit according as market conditions suggest.

Perhaps the most important marketing problem to-day is that of the municipal terminal market located at the point where the railroad or water transportation system lays down foodstuffs in the city, and which provides the starting point for efficient local transportation within the city.

Storage of food.—Storing or warehousing food is the method of equalizing over a whole year's consumption a commodity which is highly seasonal in its production. Ideally food would be produced in the impossible way of an equal daily output unvarying the year around. But storage and the use of different foods which mature at different seasons, and the bringing in of food supplies from different climatic zones, contribute toward such a daily uniformity of supply, and storage is the most important influence in this direction. Some foods like grains are rather readily stored; many require cold storage; some are too delicate for any prolonged storage and remain seasonal commodities.

The outcome of all storage is to equalize consumption and prices throughout the year: "The general effect is to raise the price to the producer and lower the cost to the consumer by the avoidance of waste both physical and commercial."

Cold storage of eggs makes their price to the producer higher at the peak of production than it would otherwise be, and higher then of course to the consumer. In the season of low production, storage eggs are of course less expensive than scarce fresh-laid eggs would then be and the fresh egg itself has its price held down, hence the consumer pays less than he otherwise would in time of scarcity. Cold storage may as a net result make all the eggs consumed during the year cost more than under the old system of a low price and a subsequent high price, but the price is more stable and that is an advantage to producer and consumer alike. Storage may be a means to monopoly though it seems that cold storage as a new agency has been subject to hysterical attacks in this regard. Surplus food stocks held in cold storage for more than 30 days are regularly reported by the United States Department of Agriculture, and this information is important in determining market prices, and tends to prevent price exploitation. Graded food products put in storage can be more readily used as collateral for business loans; graded products can be stored more effectively, grading helps storing and that helps trade financing—thus one modern market function helps another.

Storage is at present largely controlled either by the wholesale traders as distinct from producers, or by separate corporations that specialize in cold and other storage service. There is a pronounced tendency for food producers to undertake more of the storage function in the future just as they are taking over the grading function, and for this purpose to own warehouses at country shipping points and at city terminal markets. It will be to their advantage to do so, and not to the consumer's disadvantage.

The retail dealer of whom the consumer buys is also to a limited extent a warehouser, or one who holds goods in storage until called for by the purchaser; indeed the very word "store" indicates this service. Part of the retail price goes for his service of creating the exact time-utility of which the consumer has need, that is, having the commodity on hand

at the exact time the consumer desires it. In efficient grocery management, goods are stocked ahead 30 days on the average —some, as fresh milk, are replenished every day, some only at intervals of weeks. The household itself renders a final storage service in foods, the extent of which is, however, decreasing under city conditions.

Retailing.—There are 37,500 retail grocery stores in the United States, one for every 293 persons or 58 families; and in large cities there is a store for every 40 to 50 families, so that in small places each store on the average serves more people. There are many types of retail stores and many criteria are used consciously or otherwise by consumers in selecting a store.

Criteria of store selection.—The following are some qualities in terms of which customers select food stores:

Economy—As regards the price charged; quality in relation to price; honest measure; services rendered in relation to price, e.g., delivery or credit; time saved in reaching store by walk, by telephone, and in completing the purchasing act in the store; economy sought in terms of cash payment, or cash and carry, inexpensive fixtures, a minimum of clerk service.

Stock of goods—The specialty store versus the general store carrying all kinds of foods, meats, fish, breadstuffs, etc., as well as groceries; stock as regards varieties of goods; as regards qualities desired; as regards seasonal and imported goods.

Services—As regards quick intelligent salesmanship at the counter or in taking orders at door, or on 'phone; accurate filling of orders; legible sales slips; delivery at house, regular and special; opportunity for inspection of goods at house (as with huckster); charge accounts; attractive equipment; sanitary condition in stores; sanitary habits of clerks: advertising of bargains.

Time-saving—As by 'phone service; delivery; adequate number of clerks; self-service in clerkless store; honesty in weights and measures which make unnecessary checking up when goods are received; personal standards known at store,

or purchase of graded, standardized and package foods so that 'phone or written order is entirely satisfactory.

Location of store—Convenience of the neighborhood food store near one's home; food part of department store as a convenience in shopping; public market, convenient in comparing dealers.

Caste factors—What others think if one buys at the "best" store; "economy" stores, "cash and carry," "self-service" stores.

Non-economic factors.—Trading at a store because of friendship or sympathy for proprietor; the social welfare motive as in joining a cooperative store, or declining to buy from mail order houses in favor of local dealers.

The customer and the store.—The retail purchaser could become more of a factor in marketing problems by asking such questions as: just what services am I securing, do I wish all the services I receive, and can I get them in some more reasonable way? If I prefer to pay cash, is there a store that gives an advantage for cash? Can I save by self-delivery if I wish to undertake that? Can I get a price differential if I wish to buy in quantity? Are lower prices available in my market so that a slight inconvenience of travel may create a saving? Group action as by a woman's club in considering the improvement of local markets, or group organization as of a consumer's buying club, may bring direct benefits to consumers.

Some one has said there are three classes of retail stores, full-service stores, middle class stores and cheap cash or economy stores; and that there are four classes of customers, class A who can afford service and are willing to pay for it, class B who can afford it but do not want to pay for it, class C who cannot afford service but want it, and class D who cannot afford service and prefer performing it rather than paying for it. The economy stores are securing their trade from class D and parts of B and C.[1] The point for the average consumer is to classify himself and his available stores

[1] S. L. Stix, quoted by Cherington, *Elements of Marketing*, p. 130.

according to this and other criteria and then act honestly his part in marketing.

The trade has certain complaints against the consumer: buying in too small quantities, demanding too wide a variety of supplies, and asking quick service in the store, with frequent deliveries. Consumers are in part responsible for some of the unnecessary costs of trade, as over-elaborate store fixtures, which chain stores have usually eliminated in favor of relatively simple standardized equipment; "services," which in department stores have probably gone to absurd degrees in concerts, excessive deliveries, returns, educational classes, information bureaus, etc. Yet even here the dealer has a justification that these services substitute for the personal acquaintance factor of the small store in creating that goodwill without which continuance of business would be impossible. Still, when one-third of the items charged in a department store are returned as has happened, there are abuses by customers that cost everyone money.

One abuse in the retail food trade is that prices are too fixed because consumers do not demand changes in retail prices when large changes occur in wholesale prices. Retail prices tend to fluctuate less than wholesale which respond daily to changes in supply and demand. It is well that retail prices do not constantly fluctuate as do wholesale but they should respond more than they do to large changes in wholesale prices, at least to downward changes. Consumers can help secure these price advantages by keeping in touch with larger price changes. The wholesale trade in produce is interested in securing more flexibility in retail prices, as lowered retail prices is the only way to quickly move perishables into the hands of consumers when the local wholesale market is overstocked. This is the solution of the problem of fruit allowed to waste in wholesale markets and even in orchards—lower prices and publicity among consumers would tend to absorb much larger quantities of perishable foods.

Types of food stores.—Retail stores have been classified

as: (1) those chosen for convenience, the ordinary neighborhood store, (2) those chosen for economy, as the chain store, the "food department store" and the food division of a general department store, and (3) those catering to caste or those carrying the most expensive grades of foodstuffs and supplying a very select trade.

The town household's available retail markets may comprise simply the three fundamental types of stores, the grocery, the meat store or butcher shop, and the bakery; in the open country there may be simply a general store carrying foods and other commodities. In larger places, there are also "green groceries" or vegetable and fruit stores, fish stores, and dairy stores that probably also carry eggs and butter. There are other special stores, particularly the delicatessen or cooked food shop, which handles cooked meats, sausages, canned and packed foods, and prepared salads, and which first appeared in New York about 1860 and has spread to other cities. There is no standard organization of the retail market which is everywhere adhered to. Milk for example may be delivered at the door by a producer, or by a milk company that buys it of producers, or by a grocer who buys it of a milk company. The dairy company may also bring eggs and butter to the door. Fresh fruits and vegetables will usually be sold by the general grocer but may be taken on by the butcher, or the latter may lease part of his store-space for a special vegetable stand run independently, or the stand may develop into a separate fruit and vegetable store.

The local neighborhood food-store supplies most of the food purchased in city or country, but in many places the itinerant dealer with wagon, truck, pushcart or basket, even, may be a large factor in food distribution, particularly of vegetables and fruits and in some cases fish and meats. Mail order buying from mail order houses for dry groceries, preserved fish and meat, etc., and from rural producers for fresh eggs, butter, fruits and vegetables is also a considerable factor with many families.

The general grocery store is one carrying a variety of food supplies and often sundries. Its advantages include: the wide variety of stock; credit business; location convenient to home of purchaser;[1] personal management by owner resulting in maximum of accommodation; absence of "leaders" at marked-down prices; free delivery; usually prompt service in the store. Its disadvantages include: less variety in the limited field than with specialty stores; prices possibly higher than in department or chain stores; usually same price whether goods are carried or delivered.

The specialty store handles some limited type of food, such as the bakery, meat, milk, fruit, vegetable, delicatessen store. The advantages include: wider variety within its field; fresher supplies and often price advantages. The disadvantages include: time lost in visiting several special stores; location often at a greater distance than the general store; the frequent absence of a delivery system; and charge accounts not always encouraged.

The chain store is operated as part of a system of similar retail units by a corporation operating in a single city, or in several cases over a wide area including several states. Lower prices on some or all lines, the larger purchasing power, wholesaling by the organization, standardized equipment and salesmanship, may be a basis of gains that could give lower prices —but absentee ownership and hired-man management are offsetting sources of loss; the lower prices represent in part elimination of credit and delivery and reduction in clerk hire and to that extent are consumer's economies, paid for by the consumer himself. Disadvantages: usually no delivery; lost time in buying since all packages are put up as ordered and the clerical force is insufficient for busiest hours; the hired manager has less interest in custom than the proprietor-manager of the general food store; the stock is limited both as to kinds of food and as to the brands so that shopping elsewhere is necessary;

[1] "The much maligned corner grocery store may be the most economic supply depot for the urban home."—Thomas Nixon Carver.

the customer in part earns his savings by lost time, by carrying home, etc.

Department store "grocery department."—Advantages: Convenience, as buying food becomes a part of general shopping; single account carries food and other purchases; often has "leaders" at special values.

Disadvantages: too far away for personal selection except when shopping; stock may not be complete in all lines.

Food department store.—A large food establishment or market carrying all kinds of foods with a common delivery system, that is, a department store with its divisions devoted exclusively to foods.

Advantages: Consumer's convenience in selection; wide variety; prices may be lower, due to enlarged buying power, with saving in single delivery service and common credit department; both cash and credit sales.

Disadvantages: Location may not be convenient to residence district.

Municipal markets are places designated by the city for use by a number of persons for marketing food products under municipal supervision. Private markets of somewhat similar plan exist in many cities. The following facts concern municipal markets:

Of the 227 American cities over 30,000 in population, 128 cities [1] reported 237 such markets in 1918; 49 of these were in the 10 cities of over 500,000 population; 41 in the 12 cities of 300,000-500,000; 44 in the 47 cities of 100,000-300,000; 53 in the 62 cities of 50,000-100,000; and 53 in the 85 cities of 30,000-50,000 population. New Orleans had 19 markets besides 9 private markets not counted; Baltimore 11, but most places had 1 each. Municipal markets are of three types—141 of "open" type; 57 of "enclosed" type; and 39 of open and enclosed type. The business in 14 markets is wholesale, in 174 is retail, and in 49 is both wholesale and retail. All open markets cover together about 100 acres in area and 20 miles linear

[1] *Municipal Markets*, 1918, U. S. Bureau of Census.

feet along curbs and 25 acres of sheds, with standing space for 17,578 dealers in the open air and 8238 under sheds. The enclosed markets cover about 50 acres with 6519 occupied stands and room for a maximum of 7512. For all markets the annual receipts from fees, etc., are $1,735,000; with expenses of $704,000 and outlays of $417,000; the market properties are valued at $28,149,000, with a funded and floating debt of $6,985,000.

Municipal markets are intended to assist in the economical distribution of foodstuffs. They should be self-supporting but not operated for any considerable profit. Such markets can be justified only if they provide better facilities or lower prices or both for the purchaser.

Massachusetts has a public market law (1915) authorizing cities of over 10,000 to maintain market buildings or in case they do not require them to designate certain squares or streets as public markets. New York in 1918 adopted a state-aid law providing that state aid might be given to one-half the cost in establishing new markets or improving old ones; the expenditure and future administration of the market to be under the general oversight of the state. During the war the number of public markets in the United States was greatly augmented by community markets started by local community committees.

Advantages of municipal markets: Prices are usually lower than neighborhood markets; presence of stalls of various kinds make varied shopping possible; quality may be fresher in a market served directly by farmers, but often is not well sorted or attractive. Bruno Lasker points out the important function of the public market "as a barometer of prices enabling the consumer to check up those quoted by dealers of all kinds; on the whole, this purpose is as well performed by the open-air curb market as by an elaborate market building."

Disadvantages of municipal markets: At a distance for many customers; self-delivery by purchaser; rehandlers may pose as farmers, thus raising prices; farmers themselves under modern conditions often cannot afford to stand in the market.

Hucksters pushcart, and basket men are a factor, in large cities particularly.[1] Advantages: make possible purchase of foodstuffs at the door of the home; develop a market for good produce that otherwise would waste in time of oversupply.

Disadvantages: often it is a higgling market, with no fixed prices, so the unwary may pay exorbitant prices; food exposed to street dirt, and may be of poor quality.

Mail order food purchase.—Advantages: Saves time of purchaser; good variety of staples made available everywhere; prices of goods delivered, particularly with large order, may be somewhat less than in local stores; desirable for large seasonal or neighborhood order.

Disadvantages: No personal selection of foodstuffs; stock limited.

The cooperative store is one owned by its own customers who receive its profits in the form of a percentage dividend or rebate on purchases. The principles of cooperation, worked out at Rochdale, England, require: open membership, any one may join by buying stock; small share-value of stock, usually $5.00; a limit placed on the amount of stock an individual can own; policies determined by one vote for each stockholder, not one vote for each share; goods sold at regular market prices; cash sales, only; 5 percent interest allowed on stock, and net profits distributed to purchasers, whether stockowners or not, in proportion to the amount purchased.

The cooperative grocery store [2] may sometime become an important factor in America but there seems no such promise

[1] See Sullivan, J. W. *Markets for the People.* Macmillan, 1913, and Nourse, *op. cit.*

[2] Ford, Jas. *Cooperation in New England.* Survey, New York, 1913.

Harris, Weirs, and Harris. *Co-operation the Hope of the Consumer.* New York, 1918.

Publications of Cooperative League of America, New York City.

Publications of New York State Department of Farms and Markets; especially of "Foods and Markets," Jan., Feb., 1921, on cooperation, with list of 56 consumers cooperative enterprises in New York.

Jones, Herschel H. "Co-operative Buying," *Journal of Home Economics,* 1920, pp. 367-374.

for the immediate future. Our traditional individualism, our unhomogeneous urban population, our high standard of living, or stated another way the small importance attached at present to small savings, the mobility of the working man and particularly the preemption of the retail field by economy stores, chain stores, and similar enterprises, stand in the way of the immediate success of a system that calls for a permanent organization, for joint action, social idealism, and the drive of economic need. Cooperation among producers of agricultural products seems, however, an assured permanent factor of growing importance and cooperative buying may come as a correlative movement. A few American cooperative stores have a long history of success and while many that start fail, new ones are ever starting, and there are to-day 3000 such stores with indications of increasing interest and success. He would be a bold prophet to say that consumers' cooperation would never succeed with us.

Household buying clubs.—In time of high prices or uncertain employment, neighborhood groups or groups of fellow employees often buy supplies together by some simple cooperative agreement. Some principles wisely adhered to in such an enterprise are: prepayment for goods so that no one person need advance personal funds or risk them on later collections; securing samples in advance where possible to avoid misunderstanding; self-delivery by persons buying or delivery arrangements made in advance and paid for as part of the cost; some definite plan in advance to cover breakage or defective goods or other losses—as by a margin charged into original cost, or by a surplus fund carried along by the club; and an equitable sharing of the work of running the club, as regards its buying, selling, etc.

Mrs. Johnson who has had practical experience in marketing clubs points out that they save money but largely because the leaders do the hard work of leadership, buying, holding the stock, and selling, for which they are not paid, and because all members carry part of the burden in the form of

waiting for goods to come, slow service at the club station, carrying goods home, paying cash instead of credit, etc. From 1913 to 1916 there were developed some 35 marketing clubs in Pittsburgh and Allegheny County, Pennsylvania, through the enthusiastic leadership of one woman, yet the clubs all soon disappeared, owing fundamentally, it would seem, to the unfair burdens placed on leaders. The clubs showed women the costs of doing business and in one case, at least, led to the adoption of a cash business with restricted delivery by a large grocery store which was able to reduce prices thereby. But on the usual basis, Mrs. Johnson feels that permanent success cannot be expected.[1] This experience emphasizes the necessity of an equitable basis of organization.

Buying clubs often start to meet some temporary need; if there is evidence of permanency and of expansion then the basis of organization is more important and beginnings looking toward a cooperative store may well be encouraged.[2] Co-operative buying groups are often started by industrial groups —the New York Postal employees have a successful series of such clubs; and often employers give space and other aid to such buying organizations.

Costs of handling foods.—The consumer is properly interested in the assembling of various charges which make up the price which he pays. These include first of all the producer's cost, and farm management studies are beginning to give rather exact methods of checking up costs of food production on the farm. Then there follow, of course, transportation costs and the expenses of handling in the various stages of wholesale trade; and finally retailer's costs. At each of these stages a "profit" is charged, which the unthinking critic of prices is likely to regard as an arbitrarily added percentage. As a matter of fact, however, it represents the costs of handling foodstuffs at that stage.

[1] Johnson, A. Y. "The Marketing Clubs of Pittsburgh." *Journal of Home Economics.* 1918, p. 27.

[2] Perky, S. H. *Co-operative Buying Clubs.* Co-operative League of America, New York.

The following table gives the percentage which handlers of produce commodities receive for their services, figured as the proportion of the price for which each handler sells his goods; it shows the ratio of the marketing expense at each stage to the value of the goods handled. The "shipper" is the original buyer of produce; the "wholesaler" is the city middleman who receives in large quantities; the "jobber" is the middleman who breaks up consignments into amounts which can be conveniently handled by the "retailer." In some cases given in the table below, not all these separate handlers appear, and functions are merged. Where more than one set of figures follows an item, as butter, the figures on each line come from different investigations.

TYPICAL DEALER'S MARGINS ON PRODUCE COMMODITIES. NOURSE.[1]

	SHIPPERS (PERCENT)	WHOLESALER (PERCENT)	JOBBER (PERCENT)	RETAILER (PERCENT)
Butter	5–10	1–5	4–7	10–15
	.....	1.1	4.8	13.9
	.....	5.6	....	11.7
Poultry	5–10	2.5–5	5–15	10–25
	.....	11.9	....	20
Eggs	5–20	1–5	3–10	10–20
	4.3	....	12.7	14.7
Cheese	.....	4.8	10.2	21.9
Potatoes	10–20	1–5	5–15	15–25
	14.3	4.3	8.8	26
Strawberries	5–10	5–7	5–15	10–30
Oranges	.....	2.6	12.3	33.3

The Bureau of Business Research, Harvard University, in studying retail grocery stores found "gross profits," or cost of doing business, to run from 14.6 to 27.9 percent of the net sales, and that a common average gross profit was 21 percent; this 21 percent divided into various items of cost as follows:—

(1) 0.5 percent buying expense; (2) 7 percent selling expense, including 6½ percent for wages of selling force; (3) 3 percent for delivery cost; (4) 1.7 percent for management and

[1] Nourse. *Chicago Produce Market.* Houghton Mifflin Co., p. 122, compiled from various studies made by himself and others.

office salaries; (5) 2 percent for fixed charges and upkeep, including 1.3 percent for rent; (6) 0.5 percent for miscellaneous expense, including telephone, ice, etc.; (7) 0.5 percent for bad debts; (8) making in all a total for expenses of 15.2 percent; (9) leaving a net profit from merchandise of 2.5 to 5.8 percent of net sales. Stock turn-overs for groceries varied from 3.5 to 23.8 times a year with 7 times a common number and 12 times the number achieved by a group of efficient stores. Important items of cost in retailing are evidently salaries of salesmen, delivery costs, and rent, and organized attention for reducing cost could well be directed to these items.

Summary.—This survey of the general or social conditions affecting market supply and prices indicates that feeding the family involves more than what goes on in the kitchen. Legislative enactment and government services of varied kinds, the activities of producers and trade organizations, of new industrial enterprises, such as meat packing and food preserving, help get things ready for the table. There is necessarily a long process of providing foods from their original production, through assembling, grading, transporting, storing, wholesaling, retailing, and delivering into the consumer's kitchen and this process must run economically and efficiently if the consuming unit shall have the kind and quantity of foods required for its best nourishment. Even education is a prime agent for producing more and better foods and for marketing them cheaply.

CHAPTER X

CLOTHING OF THE FAMILY

This chapter discusses the individual and social functions which are served by clothing, and presents the factors within the individual family's control making for better adjustment of its clothing problem. It discusses the clothing budget, factors affecting clothing cost, and methods of promoting economy, with an analysis of the home-sewing situation and some suggestions as to the student's clothing problem. The succeeding chapter discusses clothing materials and markets.

Purpose of clothing.—If clothing was originally adopted for decorative purposes it must also from the first have rendered a gratifying service in providing protection from heat and cold, from wind and rain. Naturally enough the decorative function is the largest in human consciousness. The clothing of every one else (except those for whom I am responsible) if it means anything to me is probably a decorative matter: I see its esthetic value or the absence of it, I do not directly experience its protective function; my own clothing is both decorative and protective to me; so decorative reactions from dress outnumber protective reactions, are more constant and usually more intense.

Health and dress.—As physical protection, clothing primarily helps maintain the constant body temperature of 98°; it thus serves in part as a substitute for food since a person properly protected requires less food as fuel than does the same person clad insufficiently. Clothing also assists in keeping the body dry and clean and it should leave its external movements and inner functions unimpeded. If clothing is of improper size or shape it causes discomfort and probably

reduces efficiency. Common faults in men's dress are: tight, hot hats; tight collars, belts and garters that restrict circulation, and ill-shaped shoes that distort feet. Faults in women's dress, some varying with the fashion, are: constricted waist; over-high heels, tight shoes; long, narrow, or over-voluminous skirts.[1] Fair health tests of clothing are: Can you walk an hour, can you run a minute, comfortably? Does your clothing make you conscious of your body? Is your clothing responsible for discomfort due to heat or cold?

Clothing absorbs the moisture of perspiration, amounting to as much as one quart a day in the adult, and with it solid material that is excreted from the skin—thus tending to keep the body dry and clean. The frequent changing of garments next the skin is important for cleanliness.

Too close protection of the throat, if to the extent of producing perspiration, makes for colds and sore throats. Lack of ample clothing during cold weather, resulting in the chilling of the body, is probably a frequent cause of pneumonia. The importance of dry feet and dry clothing generally is not likely to be over-estimated. While one continues moving about, there may be little danger from damp clothing and shoes, but sitting down in damp garments is a common cause of colds and related troubles. The common reluctance to wear rubber overshoes ought to be frowned down.[2]

Clothing and self-expression.—Dress fails in its decorative possibilities when it does not bring some esthetic satisfaction to the wearer and the beholder alike, but this should be sought only to a reasonable degree in the general scheme

[1] The International Congress of Women Physicians (1919), adopted a resolution "that women be urged to adopt fashions of dress consistent with freedom of movement, physical development, and fitness for the wearer's particular occupation. (a) Young girls should be dissuaded from wearing corsets; and (b) Boots and shoes should be selected chiefly with a view to conforming to the natural form of the foot and the manufacture of such shoes shall be definitely encouraged." *Survey*, 43, p. 110.

[2] On health and dress, see also: Sargent, Dudley A. "Hygiene, Dress, and Dress Reform." *Journal of Home Economics*, 1910, p. 298.

Caton, Florence. "Hygiene of Women's Underwear." *Journal of Home Economics*, 1921, p. 252.

of life. No sane person wants to be, or to associate with, a dress-minded person, one who thinks pretty frequently of his or her own costume or those of other people. Drab monotones and unchanging forms, flashing colors and scintillating styles all miss the golden mean which makes dress one source of esthetic pleasure but not the absorbing interest.

The mental reactions of satisfaction and the reverse which arise in connection with clothing, concern both the wearer and the observer. They are based upon different conditions, some of which are as follows:

1. Contrast of dress that attracts attention because of its unlikeness or uniqueness; that is, the individual is in contrast to a social group which follows a conventional or fashionable mode. The individual is unlike the mass—for example, special dress designs that are brought out for an individual.

2. Fashion in costume is dress that conforms to a changing convention or mode, so that the judgment of agreement with the new style is evoked. The individual follows a wave of new usage that moves through society, which when scarcely adopted is followed by another new wave of usage.

3. Variety in dress, which gives rise to sensations of change and novelty, based on the new versus the habitual, or changing costume versus a constant one. Individual variety is based on an extensive wardrobe; social variety is achieved by different individual dress choice and by changes of fashion.

4. Standardized dress, a design usually of a somewhat restrained quality intended for continued use without regard to the alterations of fashion; available to all who will adopt it.

5. Individual dress adjustment more or less permanent in character, such as an individualized design, or personally preferred color or decorations of which some person makes continued use.

6. Intrinsic esthetic quality in dress, that is, arrangements of color, line, form, that are generally pleasing.

7. Professional dress, which indicates occupation, or rank in

occupation, so that costume becomes a badge of position, such as military uniforms, or a nurse's gown.

Of these possible sources of satisfaction from clothing, "variety" (3) is always valid within appropriate financial limits; "fashion" (2) may easily lead to individual extravagance and waste through unjustifiable change; "uniqueness" (1) is available only to fashion-setters, whether of the stage or of society, and a few others, and is restricted naturally to a few individuals; "standardized" dress (4) may have possibilities for business and professional women, which, in a general way, may serve the same purpose as the distinctive costumes of occupations (7); a rational standard for selecting dress will seek intrinsic esthetic quality (6), expressed somewhat in individual permanent adjustments (5) to temper the changing fashions (2), and avoiding an over-emphasis on variety (3).

There are social motives involved in the uses of dress as decoration. Dress has always been concerned with attention-getting as regards the opposite sex; the individual may be unconscious of this fact, but dress may still be effective in its appeal. Man's dress has historically shown the fact as much as woman's, but modern business has introduced stability into man's dress, and largely eliminated its decorative features and reduced men's clothing to uniformity. The well-groomed man who wears his clothes well may still have some social advantage, but, in general, men do not and cannot dress with the same distinction as do women.

Dress is the most obvious index of scale of living; and it is an ever-present index as plain to strangers as to friends.

Other functions of dress.—In addition to the functions of clothing as to physical protection and artistic enjoyment, there are the demands of *occupation, conventional social life, recreation or sport,* and *rest or relaxation,* which partly determine our wearing apparel and affect its costs. A garment may serve some one of these purposes exclusively; for example, overshoes are exclusively shelter dress; a man's cravat is decorative dress;

a kitchen apron is occupational; a man's kid gloves may be exclusively a matter of social convention; a sports coat over one's arm is purely recreative dress; and a lounging jacket is almost exclusively rest dress. More commonly, items of dress serve several purposes; thus, practically all dress has a protective function and in addition may be useful for appearance, occupation, social convention, and other purposes; and contrariwise, dress that is primarily for social convention, as a top-hat, or which is primarily for occupation, as a nurse's uniform, or for rest, as bedroom slippers, also serves to shelter or protect the wearer.

Dress and democracy.—An interesting social value in modern dress is its contribution to cosmopolitanism. Costumes once varied more or less between nations, as well as in the differences between the social castes of a given country. Now a common dress is expressing our world-wide democracy, and the costumes of the conservative Orient even are giving way before European dress. The convenience and cheapness of ready-made clothing is greatly accelerating this change; for example, the American machine-made shoe is winning its way everywhere.

The tendency of modern dress is to lessen the cost distinctions, also, since at cheaper prices clothing can be produced that looks at least much like the more expensive clothing worn by people of much larger incomes. So the working girl may dress in the latest mode in clothing that is a passable imitation of expensive garments. There are economic losses in such imitation dressing. Sometimes there are ethical costs. It reduces individuality and self-expression but there is one off-setting ethical gain—we dress as though we were all of one flesh, and it helps weld us into national unities, and even into an international unity.

Women's emphasis on dress as decoration is being limited by woman's entrance into independent income-producing vocations, and a business-woman's dress has appeared that suggests something of the transition from man's decorative clothing of

colonial times to the business man's modern garb. Business will not in the long run recognize sex distinctions, except such as are of fundamental economic concern, and we will dress accordingly. The face that reveals character can catch and hold attention without its being distracted through the fripperies of dress. "The face, not the figure, will be made the center of the dress design," said Patten.

Factors in clothing progress.—There are here mentioned briefly some of the outstanding agencies and conditions which are making for the more satisfactory clothing of the family.

1. Progress in the provision of more adequate clothing has been secured particularly by the factory system of manufacture which extends now from the weaving of cloth through to the making of the finished product, including in recent decades the development of ready-to-wear clothing, which has taken from individuals and family groups the task of making clothing and transferred it to the specialized factory.

2. Instruction for consumers regarding clothing has developed in the last generation and is now carried on by the following types of institutions: elementary grade schools, general high schools, technical and vocational high schools, higher technical institutes with vocational courses, colleges and universities, special vocational classes and extension instruction by agricultural colleges. And instruction for manufacturers of fabrics is given in trade and advanced textile schools and schools of design and for makers of clothing in trade schools. The instruction given includes courses in textiles and fabrics, costume designing, home sewing and dressmaking, trade sewing and dressmaking in their various branches including millinery, garment making, dressmaking and the making of tailored suits. The following among other social agencies, in addition to schools and colleges, give instruction regarding dress: Young Women's Christian Association and similar organizations, Camp Fire Girls, Girl Scouts, Red Cross, Church and Settlement sewing schools, and boys' and girls' clubs of the agricultural

extension system.[1] In courses on clothing for the home person there has been recently a transfer of emphasis from the making of clothing to the skilful selection of clothing in the market and proper care of one's wardrobe. There is increasing knowledge made available regarding the choice and care of clothing, its protection against injury, the cleaning of spots and stains, pressing, and proper storage whether temporary or more extended from season to season.

3. Scientific study of the economic value of fibers and fabrics made from them is being carried on in government, industrial, commercial and scientific laboratories, under such organizations as the Bureau of Plant Industry of the Department of Agriculture, United States Bureau of Standards, the purchasing bureaus of the government, and the laboratories of textile manufacturers, textile schools, and stores.[2] Scientific research contributes to clothing progress in the basic textile and dye industries; and research is now beginning to afford checks as to consumers' values in fabrics. The Bureau of Standards has made studies in the latter field and projected further research, partly in connection with the National Research Council and the American Home Economics Association.[3] Modern hygiene makes the hygiene of dress one of its divisions of study, subordinate only in importance to air, sunlight, food, water supply, and waste disposal; and promotes research as to the health reactions of clothing upon the wearer.

4. The tendency in the textile trade to standardize products and give consumers information as to the value of products—statements of percentage composition of cotton and wool mixtures, for example—is becoming more common. If no descrip-

[1] The Ohio Clothing Club program, for example, provides a definite sequence of work for club members from 10 to 18 years of age, including the making of undergarments and outer clothing in the succeeding years, with annual exhibits and rewards for good workmanship, appearance, style and materials. Practically every State has such a program.

[2] See, for example, Circular 128, Bureau of Plant Industry. *Strength of textile plant fibers.*

Household materials. U. S. Bureau of Standards.

[3] *Journal of Home Economics,* 1921, p. 400.

tive label is used, this information is usually available to the purchaser on request. The Information Bureau in large department stores, for example, one in Boston, where a customer can get personal advice on fabrics or, as in a store in the Northwest, have a fabric analyzed, indicates the same tendency to give the purchaser honest information. Brands, where honestly used, are an advance in the same direction. There is, of course, much sophistication to be debited against this hopeful tendency.

Competition should increase the advantage of good fabrics in the market, and would be sufficiently effective to drive out unworthy goods if only staple fabrics were handled and were not the textile market flooded every year with novelty goods. The retail merchant knows intrinsic fabric values, and while he is often the ultimate tool that operates for extravagance and fraud in the textile trade, yet he may on the other hand stand out strongly for fabric quality. Such an old-time merchant said, "It is discouraging that consumers demand only novelties and pay no attention to intrinsic fabric quality." A New York chain of men's stores that handles only all-wool fabrics, and tests chemically all the materials it handles holds its own competitively by adherence to dollar values in wear, as much as by attention to novelty and style.

5. The laundry trade has been interested in developing standards for fabrics so that adjustments with laundry customers for fabrics injured in the laundry process may be facilitated. The Laundryowners' Association has financed research [1] on fabrics from this point of view; they have been strong supporters of the proposed textile labeling laws.

6. Legislative standards which affect clothing include: (a) labor legislation as regards hours, sanitary conditions, child labor, and the like—including sweatshop legislation which in New York forbids the manufacture of children's clothing

[1] See, *Conservation of Textiles.* Laundryowners National Association, La Salle, Ill., 1921, reporting research at Mellon Institute, Industrial Research fellowships, Pittsburgh.

in tenement factories; and (b) weights and measures laws; trade-mark, and patent laws; labeling and similar laws intended to guarantee products to consumers.

7. Dress reform or non-conformity to absurd inherited conventions in dress there must be, if progress is to be secured; and non-acceptance of absurd innovations in dress there must be if good standards are to be maintained. There is the tradition of a King of England demanding of his tailor clothes that would not be changing constantly and when the modern coat and vest for men were produced declaring that he would not change them. About 1840, Mrs. Bloomer at Seneca Falls, the town famous a few years later for the first woman's suffrage convention, wore bifurcated garments. About 25 years ago Jenness Miller attacked the bustle and tight corset and advocated the straight one-piece gown, the short skirt for street wear, simple underwear and suitable clothing for various occasions, and with seeming success; but the hobble skirts, near crinolines, sleeveless evening gowns, and other vagaries have since come and stayed awhile and gone. Vigilance is the price of success in dress reform.

"Standardized" dress or business dress for women has made some headway as a desirable reform—meaning, by such dress, a tailored or simple gown for street use, that would be permanent in its general style as men's clothes are permanent in style but which would leave to the individual choice of fabrics and of colors, and would also leave untouched the field of dress for the home and for society where change in "style" and variety may continue to rule.[1]

8. Leaders in social hygiene are striving for suitable dress for girls and wholesome attitudes toward dress on the part of boys and girls of adolescent age. "A far graver consideration than good taste demands that the dress of the high school girl be modest." [2]

[1] See Woolman, M. S. *Clothing, Choice, Cost, Care,* p. 122, on "The Biennial Dress."

[2] *The Teacher's Part in Social Hygiene,* p. 11. Joint Committee on Health Problems, Dr. T. D. Wood, chairman.

9. Local women's clubs through their state and national federations and other organizations have worked for honest textile labels, for reformed dress or standardized dress, for domestic art education to bring dress knowledge to the masses, and for other progress in this field.

10. "Advisers to women and girls" in educational institutions and welfare workers with women employees in stores and shops—in their programs of personal work with young women—have often included the clothing interests of women as a most important item of expenditure and a large concern in the cultural life.

11. A clothing consultation service has appeared here and there in magazines, in stores, in extension teaching. Such a service is needed in every large community and might be undertaken as part of the vocational training of women under the Smith-Hughes Vocational Education Law. It would be in effect a center where help on clothing problems could be obtained by the individual woman. The best example of such a consulting service was the Clothing Information Bureau of Boston organized by the Woman's City Club as a continuation of clothing thrift work during the war and carried on for two years after the war. It was a center of instruction, exhibits, printed material, and information personally given. The Bureau reached women who had no special training in sewing and who were facing the clothing problem of themselves and their families and could be helped by lectures, practical classes, and personal advice given. Teachers, school girls, and club women also availed themselves of the Bureau's services.[1]

12. The movement for "American designs" might if successful, prove socially desirable in one respect, namely, that the sources of new designs and of impulse to changes of fashion might be more amenable to American public opinion. Up to the present Paris has ruled women's dress, and London men's. The attention being given to costume design in American schools of art should at any rate tend gradually to elevate our

[1] Woolman, M. S. *Clothing, Choice, Cost, Care,* Chapter XIII.

popular standards of taste and make America more independent in creating or controlling costume designs.

13. Thrift in dress, an ideal made imperative in the war, is still effective to some extent. It expresses itself in more thought in selection, in better care of clothing, and in more home sewing.

14. The growing appreciation of fashion as an exploiting commercial device may some time bring it under social control; to secure from it its contribution to the satisfactions from dress, but to reduce its economic wastes and its esthetic crimes.

15. There has been a marked tendency for the home to handle the clothing problems of the child in an educational way: to train the child to buy his or her own clothes, to make an allowance for this and other purposes, and to hold to strict responsibility for its use—gradually extending freedom in the use of money as the child acquires confidence and good judgment. In this way, sensible ideas of dress, of modest and inconspicuous even if expensive garb, of the subordination of dress to personality, of economy of dress, and other ideals, may be taught.

Standards or levels of expenditure for clothing.—The clothing expenditure of a family may be largely a matter of securing sufficient clothing for physical protection at the least possible cost; or it may involve a variety of dress with attention to the display factor, secured at a somewhat larger cost through modish but inexpensive designs which provide novelty though the textile materials may be of the cheapest; or, at a higher cost level, there may be secured fabrics of sound intrinsic textile quality and garments of a conservative and standard expression of the mode; at still higher costs there is a radical following of the mode in terms of choice fabrics; and on the highest cost level there are found the sources of the mode where individuality in dress is the controlling idea. It is as though the two fundamental factors of protection and decoration in dress alternated in their influence: on the lowest income level the protective factor alone finds expression;

then, with more income, decorative expression in terms of style rules though in terms of cheap materials; then, with still more income—and perhaps more social intelligence—substantial standards of fabric and design come to the front; only, with even greater income, to give place to increased attention to style and novelties expressed however in fine fabrics. Above that in cost, one comes to the sources of styles.

Without assuming that all clothing expenditure is precisely cast in the following standards according to income, they do suggest types of dressing that can be found in most communities. The costs given will be taken only in the most approximate fashion as indicating relative outgoes.

Minimum standard, or the level of protection and decency in dress.—This provides a protection against weather and a covering for the body; but gives little regard to social approval in clothing choice. This standard is made possible as much by the housewife's skill in the making, care, and repair and remaking of clothing as it is by outlay of money. This standard is found with incomes of $1200-$1500 more or less and its costs are about as follows: for a family, about $225–250; for a man, $70; for a woman, $60 (the man more than the woman); for a child of 12, $40; for a child of 8, $35; for a child of 4, $30.

Comfort standard or level of variety in dress.—This gives increased regard for protection, but brings in the factor of appearance and social comfort through use of attractive dress. This standard may, like the next higher standard, be expressed in terms of good fabric value and standard designs that will give enduring service; but where good clothing ideals are lacking, it will express itself in the purchase of a variety of garments often of inexpensive materials, but made up in the latest mode, that is, fabric value is sacrificed to style.

This standard may express itself by increased expenditure for some one member of the family, for whose gratification other members may sacrifice; or it may influence the dress of the whole group. It is found with incomes of $2000 or there-

abouts; that is, families in which the man is a skilled trade worker, or a clerical worker. The "variety standard" costs: for a family, $400; for a man, $100-125; for a woman $125-150 (the woman usually more than the man); for a child of 12, $75-85; a child of 8, $65-75; a child of 4, $40-50. On this level, also, there is much dependence upon home sewing.

Moderate standard or level of fabric quality and standard design.—This standard is likely to be found uniformly affecting all members of a family group. It is marked by conformity to general usage, but with avoidance of extremes of fashion, and by selection of substantial qualities and values as to fabric and design. Garments are selected to give extended satisfactory service and to remain within the mode rather than follow fashion. It is possible on incomes of $3000-5000 or more, and costs as follows: for family $600-900 and upward; for a man, $175-250 up; for a woman, $200-300 up; for child of 12, $100-150; for child of 8, $80-120; for child of 4, $60-100.

This standard may be thought of as belonging to families where the man is engaged in professional work or as a business executive. The substantial standards of the man, and the woman's knowledge of values, her good taste in dress, and skill of hand in the care and, to some extent, making of clothing, are the foundation of this standard.

Liberal standard or level of fashionable dressing and fabric quality.—Like level two this may be effective for some one member of a family, while the others remain on the next lower level of costs, that of substantial quality. Usually this standard is that of the woman rather than the man of the family, though it may primarily be the man's standard; or this standard may control all members of the family. This standard is that of the person following closely changes in fashion and making choices in terms of select fabrics; the costs are partly those of the original purchase, but quite as much those due to the fact that the garment must be quickly

replaced due to the obsolescence of fashion. One may place this standard as belonging to the $10,000 income and upward, but it may be sought (unwisely) on smaller incomes as a preferred stressing of dress expenditures over other budget items, by choice of the individuals concerned. This standard may be thought of as that of the individual or family interested in society, or in formal sports. This standard costs as follows: for a man, $500-1000 upward; for a woman, $750-1500 upward; for young boys, $300 upward; for young girls, $400 upward; for a family, $2000 upward.

Exclusive standard or level of individual dress distinction.—There remains the standard of the fashion-setter whose aim is not to follow a mode but to set one, in her own community at least; not to imitate dress designs but to possess and wear distinctive expressions of the mode which set her apart from her group and start imitation by others. This standard concerns women primarily, but by no means exclusively. It centers in the work of the dress studios of Paris and the first tailor shops of London, but also of New York and our provincial fashion centers.

In costs, this level may represent thousands of dollars for a single gown; its simplest expression in a wardrobe will cost probably a thousand or more dollars a year. The actual starting of a new mode, by the cooperating competition of the Paris modistes is discussed elsewhere; the securing of entirely distinctive dress that is an expression of the new mode marks the exclusive standard here considered. On this level is the dress of the leisure class which Veblen has so strikingly analyzed.[1]

The items in the clothing budget.—The wardrobe may be analyzed "structurally" according to kinds of garments—as undergarments, shoes, etc.—or "functionally"—according to the general purposes served by the particular clothing item, as protection, or appearance. A structural classification of

[1] Veblen, T. *Theory of the Leisure Class,* Chap. VII. "Dress as an Expression of the Pecuniary Culture."

wearing apparel, so grouped as to be applicable to either sex, might be as follows:

1. *"Protective Clothing":* Overcoats, cloaks, wraps, capes, mantles, raincoats, sweaters, shawls, furs.
2. *"Outer Clothing":* Suits, dresses, skirts, suit coats, waistcoats, trousers, working dresses and suits.
3. *Waists and Outer Shirts:* Shirtwaists, men's outer shirts, etc.
4. *Underclothing:* Undershirts, drawers, union suits, petticoats, chemises, combinations, corsets, corset covers, lingeries, etc.
5. *Night Garments:* Nightgowns, nightshirts, pajamas.
6. *Shoes:* Slippers, rubbers, boots, leggins, puttees, spats.
7. *Hosiery:* Socks, stockings.
8. *Hats:* Bonnets, caps, head scarfs.
9. *Neckwear:* Collars, cravats, neck scarfs, neck laces, etc.
10. *Gloves:* Mittens, gauntlets.
11. *Miscellaneous:* Handkerchiefs, dressing sacks, bathrobes, ribbons, hairpins, utilitarian pins, clasps, umbrellas, etc.
12. *Athletic, gymnasium, and bathing clothes.*

Clothing care.—The costs of special cleaning, pressing, and similar charges, are, like laundry costs of a general nature, best carried under operating expenses. But costs of alteration and remaking are to be charged to the clothing items concerned.

Clothing budget or buying plan.—Clothing selection may well be made in terms of a clothing budget or plan for each individual. The steps in forming such a plan are: First, determine the money available for the individual's clothing for the year. Second, list the wardrobe on hand, particularly as regards (a) items that will give service through the year either as they are or with repair and remaking, and (b) items that will need to be purchased and the quantity for each item. Then third, allot the money available, so as to allow in the best possible proportion the sums needed for different kinds of clothing. Use this schedule then, as a plan in buying.

Such a budget plan will be greatly facilitated by a written

list of clothing items arranged in classified form, starting with the inventory of articles on hand at the given date and listing under each heading the items which it is expected to purchase this year and, as regards important items, those to be purchased next year and the year following. Such a three-year plan permits certain economies which a single year's view does not afford.

The administration of a clothing budget calls for a written record in classified form of clothing items as purchased; this can be made easy by an account form with blanks for date, description of items, cost, and place bought. With one or more pages for each group of garments as coats, suits, hosiery, underwear, etc., and with the practice of striking off items as they are worn out or otherwise disposed of, such a record would afford a complete statement of clothing on hand. This kind of a permanent record of clothing bought will assist directly in acquiring a knowledge of clothing values and in controlling expenditures.

Individual records of the service given by items of clothing owned and used: for example that "a pair of ——— kid gloves bought at ———(date) wore well for ———months" might well be kept regarding standardized goods where it will be possible to find the same goods still in the market when one wishes to replace them.

Factors in clothing costs.—The individual's clothing expense is primarily determined by income, for dress is a commonly accepted index of financial status. Other controlling factors are: age, sex, and occupation of the individual; family status, whether one is married or single, as affecting freedom in expenditures; climate and its effect on costs; the relative place given dress in the individual's or family's plan of living; the care given clothing, including methods of laundry and repair. Finally, regard by the consumer for conditions affecting producers, as in boycott of sweated products, may increase one's own money cost but it tends to reduce social cost.

An exaggeration of dress needs and undue expenditure for

dress may arise from unwarranted imitation of higher standards of living than one's own; from an abnormal desire for display; or from an unconscionable interest in dress as such, that leads to judging self and others primarily in terms of dress. The fact that dress is one index of status explains why a person or family struggling upward finds dress demands heavy; but it does not justify reducing the food budget, so that the body is ill-nourished, or the cultural budget so that the mind is dwarfed; either procedure defeats the attempt to get ahead, since, in any permanent sense, that can only succeed in terms of physical and mental performance.

Estimating costs of clothing.—To find clothing cost for a year or other period of time, one may: (1) Keep a record of purchases during the year and then assume that the expenditures during the year measure the annual cost, provided that the person's standard of living is not materially changing from year to year. (2) A more accurate measure may be had by taking inventories of clothing on hand at the beginning and end of the period in addition to the record of clothing expenditures during the year, then the cost for the year is found by taking the sum of the inventory at the beginning of the year and the clothing expenditures during the year, less the inventory of clothing on hand at the end of the year. (3) An average of 2 or 3 years' actual expenditure gives a more accurate measure of average cost.

All these methods of finding clothing cost require records of expenditure over a year at least; it is obvious that less than a year's record would not take account of seasonal variations in costs, and that of all family expenditures clothing is the most seasonal.

There are two methods of estimating clothing cost, where there are no expense records, which are based on making a present inventory of the wardrobe and working out estimates of cost from the inventory. (4) An estimated list of items and amounts purchased during the current year, based on inspecting the wardrobe, gives an approach to the result of keep-

ing accounts for a year. (5) A more accurate estimate may be made, based upon the inspection of the wardrobe, by listing the value of the clothing used up during the year, counting in at full cost all clothing bought and entirely used up during the year, and at one-half the cost wardrobe items which last two years, and at one-third cost items which last three years, etc.; this method gives a result similar to (2) above, but uses a present estimate instead of two annual inventories and the expense record.

Different items of clothing last for varying periods of service; an ordinary straw hat is good for one season with most people, but some make it last two seasons, and some require two hats per season. A man's business suit will usually last one season as a first suit, and one season as a second suit, but some people make it give two years of direct service, and some replace it within a single season. Ten or twelve pairs of hosiery a year probably indicate average service. The length of service of any item of clothing varies, of course, with: (1) the quality of the material; (2) the amount of wear and tear it receives, which is determined by the occupation, personal habits, etc., of the wearer; (3) the type of laundry process and other care it receives; and, finally, (4) the wearer's personal standards in the matter of dress which require an earlier or later replacement.

Clothing in the budget.—Clothing in American families requires from about a tenth to a fifth or more of the family income the proportion for clothing increasing as income increases, so that the traditional figure of 15 percent for clothing is acceptable. Probably the tendency to spend more for clothing as more money is earned, which has been found in American workingmen's incomes, is found in many higher incomes, especially those used for a certain type of living which stresses "conspicuous expenditures" as an index of social position.

Engel allowed 16 to 18 percent for clothing in his standards for Saxony in 1857. Massachusetts working families in 1885

spent from 10.5 up to 19 percent as incomes increased from $450 to $1200 and above; and in 1901 spent from 9.1 to 14.6 percent for clothing. In the United States 1900-02 study, clothing took from 11.9 to 15.7 percent as incomes increased from $500 to $1200, and in Chapin's New York schedules (1907) from 12.4 to 15.2 percent as incomes increased from $500 to $1200. In Beyer's Philadelphia study (1918) clothing took from 9.3 percent at $600 to 15.5 percent at $1800, averaging 13.9 percent; and in 12,000 families of the United States Bureau of Labor study, 1918-19, the clothing percentage increased from 13.2 to 20.4 as income increased from below $900 to above $2500, with an average of 16.6 percent. The percentage in the fair minimum budget of the National Industrial Conference Board is 13.2, which is the average of several budget studies. Six comfort budget estimates quoted in the Board's summary give an average of 19.9 percent for clothing.[1]

Value of family wardrobe.—The capital investment in the clothing wardrobe (not annual expense) on moderate incomes seems to be from 25 to 100 percent more than the sum that must be spent annually for new clothing. With the wardrobe of the minimum or comfort income standard it is nearly all replaced each year; thus in the United States Bureau of Labor budget for the government clerical worker's family, of a total expenditure of $2246, the annual clothing expenditure was $513 or 22 percent, and the wardrobe investment was $708 or 31 percent as much as the income, so that about 70 percent of this budget was renewed annually. With a moderate or a liberal income probably not over half of the wardrobe is replaced annually; but with the super-liberal income or the exclusive dress standard the wardrobe is again more nearly replaced every year.

Relative costs of clothing for individuals.—Ogburn found that the clothing cost varied about as food cost for persons of different ages and sexes and assumed that the index

[1] "Family Budgets of American Wage Earners," *op. cit.*, p. 37.

Relative Factors for Clothing Cost for Individuals.

	CHICAGO DEPENDENT FAMILY [1]	BOSTON DIETETICS BUREAU [2]		CHAPIN, N. Y. CITY [3]	BEYER, PHILA. [4]	N. Y. SHIPBUILDERS [5]	KENNEDY, CHICAGO [6]	GOVERNMENT EMPLOYEE STANDARD [7]
		CHEAP STORE	HIGHER GRADE					
Man at ordinary out-door work..	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Woman or girl at housework.....	.77	.83	1.00	.69	.84	.71	.82	1.37
Working girl or boy (min.) (to be increased as dress requirement indicates).....	1.07	1.46	1.55	....	....	....	....	....
For office work.....	1.28	....	....	....	....	....	....	....
For high school girl or boy.....	1.07	....	....	....	....	....	....	....
For children up to 13 years in grades	.71	....	....	....	....	.85–.96	....	.87
10–13 years	.64	.80	1.00	.45	.88	.53–.55	....	....
6–10 years	.54	.56	.75	.36	.67	.45–.51	....	....
3– 6 years	.39	.46	.55	.30	.44	.40–.44	....	.68
Under 3 years.....	.32	....	....	....	....	....	....	.39
For all children.....	....	....	....	....	....	....	2.36	....

[1] Computed from *Chicago Standard Budget for Dependent Families.* 1919.

[2] Boston Dietetics Bureau, Oct., 1921, clothing allowance of $1.50 per week for man at low priced store or $2 at higher grade stores.

[3] Chapin, R. C. *Standard of Living in N. Y. C.* Figures are for a family minimum clothing budget of $95. (1907.)

[4] Beyer, Davis, and Thwing. *Standards of Living in Philadelphia;* division of a fair clothing standard of $299, allowing $77.68 for man.

[5] "Year's Clothing Bill of 100 families of wage-earners in N. Y. City shipbuilding districts." *Monthly Labor Review,* Sept., 1918. Where two figures are given in this report the first is for girls, the second for boys; the age groups are 15, 11-14, 7-10, 4-6, 2 and under, years. Allowance for man $73.17.

[6] Kennedy. *Chicago Stock-Yards Community.* Division of average of $95.41 per year for family's clothing, allowing $23.64 for father. 1914.

[7] *Tentative Quantity and Cost Budget.* U. S. Bureau of Labor Statistics, August, 1919. (Total allowance, $2,262 for family of five; clothing $513.)

In the indexes given in the table those of columns one and two are from budgets for the relief of families in distress; those of 3, 4, 5, and 6, workingmen's families; 7, government clerical worker.

for individual food requirements measures fairly well the relative cost of clothing. The preceding table has been computed to show the relative allowances for the clothing of different typical individuals in several studies of minimum or standard budgets for workingpeople. In each case the man's cost is stated as unity and that of the others as a percentage figure of his clothing cost. The woman's costs vary from 69 to 84 percent of the man's cost, with the exception of: (1) a schedule based on purchases at a higher grade store, or—what is the same thing—on a more liberal income where her costs equal the man's; and (2) the government employee's budget of $2262, which allows the wife 1.37 times the man's allowance.

Can a standard be set as to clothing costs for different members of the family? With a low income, the man's clothing costs are higher than the woman's; in the standard of living of skilled workmen, the woman's clothing has come to cost as much as, or even more than, the man's, and it seems to grow more rapidly than the man's as income further increases. One might suggest as a maximum limit that a woman's clothing should never cost more than twice what her husband's costs.

The relation of children's clothing to that of parents' affords another standard for checking dress expenditures. The clothing of the high school girl and the young woman still at home—and to a slightly less extent that of the high school boy and the young man at home—are likely to be extravagantly planned. Their clothing will cost much more, relatively, than the clothing of younger children. It seems a fair standard to suggest for all except minimum incomes that the clothing of the young man should generally not cost as much as that of his father and, similarly, that the clothing of the young woman should generally not cost more than that of her mother. Certain conditions as outside occupations and social demands may increase costs of certain individuals, but a general rule as stated would tend to promote a proper proportion.

Advance in clothing costs.—Clothing costs during the war rose to a higher peak than any other commodity in the family

budget reaching 177 percent above pre-war prices in March, 1920, and decreasing to 54 percent above in July 1922. Clothing was the first retail commodity to go up, and went up fastest as well as highest.

The Massachusetts Commission taking a man's blue serge suit as an index of changes in the cost of men's outer garments found that a suit which cost $9.50 to manufacture in January, 1913, cost $31.50 in January, 1920, with the detailed changes as follows:

	JANUARY, 1913	JANUARY, 1920
3⅓ yd. serge at $1.25; at $4.15.....	$4.22	$14.01
Cost of trimmings	2.10	5.10
Cost of cutting	.22	.54
Cost of trimming (labor).....	.10	.20
Cost of making (labor).....	1.86	8.90
Overhead	1.00	2.75
	9.50	31.50
Salesman's commission	.57	1.89
Total cost	$10.07	$33.39

The advance in the cost of the fabric (232 percent) was almost exactly equal to the advance in the total cost of manufacture (231 percent).[1]

Economy in dress.—Financial economy is secured by reasonable attention to the selection, purchase, and use of clothing.

In selection of clothing, economy may be advanced by the following practical rules. A more or less permanent decision may be made for certain items of clothing as to the brand or grade to be used, and also as to the precise style, number, etc., so that new items of this kind may be bought to replace exactly the old; ordering then can be done automatically, by mail as well as in person. Many people buy shoes in this way, and shirts, collars, and other standard articles; more probably buy underwear and hosiery in this way; and every one ought to

[1] *Report of Mass. Comm. on Necessaries of Life,* 1920; p. 86.

follow this method where practicable. It is essentially irrational to spend energy deciding and redeciding what one will wear when the issue concerned could be disposed of once for all in a well-considered decision that would last several years at least. (See Brands.)

Knowledge of quality should guide selection. There is justification in the housewife's buying for the family, since her judgment will be fortified by rapidly accumulating experience. Utility should have prime consideration and with outer apparel the appearance factor will have at least equal weight; but with undergarments appearance should be given distinctly less weight than utility. The utility standard requires: that comfortable and durable clothing be secured; that clothing be convenient, for example, that work clothes, whether men's or women's, have adequate pockets; that proper sizes be selected, since small hosiery, for example, breaks at toe and knee, and small neck bands, shoes, etc., interfere with circulation of blood as well as give discomfort; hence it is desirable that a schedule of the sizes worn by the various members of the family be kept by the family buyer.

Extremes of fashion should be avoided since styles rapidly become obsolete; similarly elaborateness of trimming and overdecoration should be avoided as they cause rapid deterioration. Substantial fabrics which have good wearing quality should generally be chosen rather than novelty goods.

Economy in purchasing can be secured by: first, selecting certain stores and dealers, since a permanent relation with one store usually has the advantage of acquaintance with intelligent salespeople who come to know one's financial and other standards and so facilitate the work of selection although "shopping" and comparing values in different stores for most important purchases is customary. Watching special sales is sometimes a great advantage—as of women's winter suits after New Year's and of men's haberdashery in the fall—but it is obvious that not every one can depend upon such sales. Local customs in the trade as to putting

over-season goods on sale at special advantage should, however, be learned and taken into account.

The type of store in large cities—whether a neighborhood store, a department store, or a specialized store—may be an important choice, as may mail-order buying under certain conditions.

As to time of purchase, the value-wise buyer avoids the busiest shopping hours and bargain, Christmas, and other crowds where good judgment is difficult.

Cash, and charge accounts settled monthly, rather than long credit purchase, are to be preferred, and the avoidance of any long terms such as installment buying.

Purchasing should be done with a pre-determined list of items in hand; do not buy "bargains" which you happen to see, unless they are a listed need.

An annual buying-schedule for clothing, or clothing budget, should be planned for the individual and the family, stating the items of clothing needed each season and the probable expenditures involved. By this method, clothing cost can be distributed more evenly through the different months, an important advantage with wage and salary-earners. With this knowledge of annual requirements, it is possible for the housewife to take intelligent advantage of chance bargain sales.

Ready-to-wear, tailor-made, homemade.—Ready-to-wear versus custom-made versus made-at-home garments is a fundamental matter for decision, economic advantage tending, with some exceptions, to favor ready-to-wear or ready-made garments. Where there is available in the home group time and skill for home sewing and dressmaking, the purchase and making up of materials is a very advantageous process, for time that would otherwise be unproductive is made to add to family income as directly as though the person went out for wages; and, with good textile judgment, it is possible to secure suitable and durable fabrics for making up. With the best of average skill, not all garments can be made at home, however; men's suits and women's tailored suits are prac-

tically ruled out; and the increased use of knit underwear has reduced the amount of women's underclothing which it is an advantage to make at home. There is still available for home-making: women's dresses, shirtwaists, and underclothing, nightwear for men and women; children's clothing and women's and children's hats; and, occasionally, other articles, as men's shirts and women's suits, and sweaters for children and adults.

While ready-to-wear clothing seems bound to encroach further on the homemade, it seems proper to assume that the making of certain items of clothing will remain a permanent household art with the average woman, just as will cooking, and that the teaching of these household arts for the sake of the home must be continued. Already, however, there is more need for knowledge of how to select ready-made clothing than how to make clothing, and household-arts instruction needs more emphasis along that line.

Ready-to-wear clothing of all kinds is now available so that, without exception, one may purchase every item of a wardrobe ready to put on. "Custom-made"—that is, the manufacture of garments on individual order—still persists, however, for men, as regards suits and overcoats particularly, and to a very slight degree as regards shirts, shoes, and cravats; and for women, particularly as regards tailored suits, coats, dresses, waists of all kinds, and hats, and to a less degree as regards underwear, and to a slight degree as regards shoes and gloves. The considerations that favor the choice of custom-made goods are: (1) A desire for an exclusive fabric pattern (a college tailor, for example, may make men's clothes on an agreement that only one suit of a pattern shall be made in the community). (2) A better fit; and with persons of unusual size or proportions custom-made may be the only method of securing a fit. (3) For some persons, the desire for an unusual design or mode seems best secured through a garment designed solely for the individual. (4) For others, when only extremes of fashion are found in local ready-made cloth-

ing, custom-made may be the best means of securing a moderate mode or design which will last through several seasons. (5) Sometimes an advantage in durability of fabric is found with custom-made clothing, although, dollar for dollar, ready-to-wear goods should ordinarily give better fabrics. (6) The person who measures clothing value by the money expended naturally inclines to custom-made, as affording opportunities for higher costs, and hence better values as he sees it; but in this regard ready-to-wear dresses and suits—for women, at least—have gone into higher ranges of cost to satisfy this group.

Ready-to-wear garments have the following advantages: (1) They give choice in terms of finished garments which may be tried on and compared as to appearance. The occasional disappointment, of having a garment made to order and then not liking it when completed, is avoided. (2) Ready-to-wear garments, if made in up-to-the-minute modes, make possible the super-fashionable in dress, which appeals to some. In such garments, however, a large share of the price paid is a charge for timeliness rather than for fabric value, for the dealer must safeguard his profits against risk of loss on garments remaining unsold when the mode passes; and so the person who buys ultra-fashionable garb pays out of proportion for the wear received. (3) Those desiring a medium style which avoids the extremes of mode and consequently is available for use through more than one season, form an increasing group of buyers. The trade in men's ready-to-wear clothing exactly meets the needs of this group now, and there is some evidence that the same result will be as commonly attained in women's ready-to-wear suits. The demand here is for garments which primarily have fabric value rather than style value; which are acceptable in a general style that will have permanence. The increasing number of professional and working women outside the home and of professionally-minded women in the home is the basis of such an anticipation. (4) Ready-to-wear clothing is a great timesaver for the purchaser. It eliminates

half the work of purchasing, the innumerable visits for selection and fittings. (5) Ready-made clothing saves money, and for this reason alone it will make its way, since there are no higher interests involved to limit its adoption. Just as sweated work in clothing is beaten economically by the factory process, so large-scale production of clothing must defeat the custom-method by lower costs for the large group. The custom-made will be maintained, of course, but for a relatively decreasing group.

Economy in clothing use.—Economy in clothing use requires:

1. Adequate storage, during both current use and off-seasons. Current storage should protect from dust, keep in condition for immediate use and be adequate as regards spacing, shelves, drawers, hooks, lighting, etc., to accommodate instant use. Permanent storage should protect from sun, dust, and moth (the last requires preventing access of moths).

2. Immediate repairs, secured either by constant attention or by a large supply so that garments needing repairs can accumulate until sufficient to warrant a day or week of repair work. Proper cleaning, laundry, pressing, the immediate removal of spots; brushing before hanging up; occasional sponging and pressing of outer garments; for clothes that are to be washed, laundry by soap and hot water for a sufficient time, rather than the shorter process with bleach often used in commercial establishments; the "dry cleaning" of outer clothing and dressing of shoes—all these matters of attention will prolong the service given. Frequent washing of hosiery and immediate mending illustrate this principle.

3. Use of protective garments during work: aprons, overalls, work gauntlets, etc.

4. Use of protective garments against dampness: rubber overshoes, raincoats, umbrellas.

5. Frequent changes of garments worn next the body: daily change of hosiery, collars; tri-weekly change of underwear.

6. "Resting" garments (and perhaps the wearer); wearing

alternately two pairs of shoes has been recommended as prolonging wear; resting garments and self by putting on house clothes or second suits for evenings at home, and dress clothes for evenings out.

Home sewing as productive labor.—The housewife's contribution to the family's clothing is one of her most important economic services; it includes skilful purchasing, thrifty care, oversight and repair, and often the actual manufacture of children's clothing—even if not that of the elders—and the inportant alterations in the clothing of women and the making over of partially worn clothing of adults for children.

A margin of free time can thus be turned into the equivalent of money by sewing for oneself. How much is such labor worth? The saving of making at home versus buying ready-made is difficult to estimate in general terms, since materials, findings, and labor are all cheaper for the large quantity operation than for the home worker. In a specific case one can compare what the ready-made would cost with the cash outlay for making at home and this represents the worth of one's labor. In the case of half a dozen children's garments, home labor thus applied saved respectively 25, 30, 44, 48 and 50 percent of the cost of the purchased garment.[1]

Mrs. Baker [2] found in trying to match values between home-made and ready-made undergarments that an elaborately trimmed garment might cost more to make than to buy ready-made, and that there was more saving in making plain garments of good material; in making colored wash-dresses, the saving was largely through securing better material. "For the busy woman who wants simple garments of good material," Mrs. Baker feels, "there is little saving in making them at home."

Miss Cranor estimates that home-made clothing is a saving

[1] Estimated from schedules in M. Jane Newcomb's *Children's Clothing*. Extension Circular, 48, Penna. State College.

[2] Baker, Charlotte Gibbs. "Ready-made and Home-made Clothing." *Journal of Home Economics*, 1916, p. 448-456.

of ⅓ to ⅔ the expense of ready-made.[1] "The time one has, the value of that time, the amount of money one can afford to spend for clothing are factors which determine whether or not garments are to be bought or made at home," she adds.

Amount of home sewing.—A "Clothing Survey" of 1400 rural homes in a few Illinois counties made by the Extension Service of the University of Illinois showed that 20.1 percent of the women make all their clothing except tailored suits and coats; 64 percent make underwear or house dresses, the number making the former being less than the number making the latter; 8.6 percent make no clothing; 53.8 percent of the women make clothing for children, a number which was 68.7 percent of the number having children (hence two out of three mothers make clothing for their children); 15.4 percent make shirts for their husbands—some making silk shirts and some work shirts only. Questions were asked regarding knowledge of clothing cost, and 15.4 percent reported that they knew how much their own clothing cost; 8.1 percent kept a clothing budget, and 59 percent expressed a wish to keep a clothing budget.[2]

Returns from about 60 college graduates trained in home economics and now married and keeping house showed that one-third of the group made practically all of their children's clothing; more than three-fourths made their own underwear; and at least some of their dresses; and more than forty percent made some garments for husbands.[3]

Of a group of thirty women home economics teachers, the following members of the group had made within two years two or more of the articles mentioned: eight had made summer hats; nine had remade hats; twelve, silk waists; ten, cotton waists; four, cloth dresses; eight, silk dresses; twelve, wash dresses; and twenty had made underwear.

[1] Cranor, Katherine. "Homemade versus Ready-made Clothing." *Journal of Home Economics*, 1920, p. 230.

[2] *Results of Clothing Survey in Illinois.* Mabel Wilkerson, University of Illinois, August 30, 1920.

[3] Brown, Clara M. *Journal of Home Economics*, 1923, p. 88.

These facts substantiate the impression that professional women still do a good deal of their own sewing. Those interested in the problem of standard wages for women have suggested that women should not do any more sewing than should men. A group that does sewing for itself will tend to accept lower wages than another group that buys its clothing ready-made. It is questionable whether society can afford, from the point of view of expecting full service from its teachers, to pay them so low an income that they must spend several hours a week in sewing and laundry work.

Whether professional women will continue to do more sewing for themselves than do men will turn partly on whether they regard the sewing as a grubbing art whereby a low income can be increased, or as a personal attainment with values for self-expression and satisfaction. It may well be that the woman of the future, while buying more of her things ready-made than at present will still continue to make things for herself, because of the distinctive character of the product and also of the enjoyment and satisfaction in that kind of activity.

Equipment for home sewing.—What equipment should a household have in connection with its clothing? Of mechanical equipment there seems to be the sewing machine only, unless one were to include equipment for laundering. The sewing machine is almost universally owned—probably over 90 percent of households on the comfort standards or above, and a good part of small income families, have one. The electric motor-drive for the sewing machine is not yet common but it is an invaluable accessory as it not only saves the physical energy of the worker but it reduces the time required for a given task or multiplies the amount of work done in a given time. Other forms of "capital" or equipment used in sewing include a special room set apart for this division of household work, with adequate storage for materials, supplies, and partly finished goods and goods to be repaired. There is needed one or more storage chests with classified compartments for threads, yarns, and findings of various kinds and

for cloth and garments, etc.; a sewing table; wardrobes for finished garments; a long mirror; dress forms; etc. In addition to the sewing machine there is really a considerable investment ($100-$200) which a household may wisely put into the equipment of the sewing room—an investment that families on the moderate and liberal income levels can well afford and that families on smaller incomes may well approximate as far as possible.

The clothing of high school girls.—The clothing of high school girls is likely to be one of the problems of the moderate income family and indeed of the family on any income, large or small. A few years ago (1914), the girls in a Michigan city high school gave statements of the annual cost of their clothing, which amounted to an average of $115: five of the group spent less than $50; twenty-one, less than $100; eighteen spent between $100 and $250; and the largest figure was $301. In 1919, in a mid-western city, similar costs averaged $157. These probably represent average costs for American high school girls.

The individual or the single family often feels itself powerless to establish reasonable dress expenditures in the face of community standards that are absurdly extravagant. This may be the case with parents whose children growing up in democratic high schools have come under the influence of clothing standards set by thoughtless teachers and the children of wealthier families. The fact is that such standards may operate more or less unconsciously as far as the group is concerned, but nevertheless carry a tragic relentless oppression for individual families. "Our three children for whom we had planned a college education are so enmeshed in extravagant living in high school that the venture is hopeless, and we are in bonds to a scheme of living that we cannot afford and that provides no margin for saving for their higher education." One way out may remain, and that is for parents and school authorities to set group standards of living in a conscious way by frank discussions of different possible standards and their

relative costs; we need to sketch rational life plans for young people that will give them the best possible present experience, and give a basis for future development. By joint action and quite possibly through the initiative of the girls themselves undesirable standards can be altered. Parent-teachers associations have sometimes been able to set standards for the social life of young people through discussion and agreement. Women in families of larger incomes, if made to understand the situation, would join in such a group movement. Simplicity in dress, economy in clothing expenditure, hygiene and comfort, and artistic effects that rest on the beauty of appropriate dress rather than on novelty and wasteful dressing are the objects to seek. The state home economic leaders of Texas recently sought such goals by a state-wide campaign on dress standards for high school girls—using in the schools posters bearing statements on dress furnished by prominent people; an essay competition; a series of exhibits, local, county, and state, of clothing made by the students; and other novel devices to set consciously the desired standards.[1] The National Board of the Y. W. C. A. has with a similar purpose prepared moving pictures and exhibit material of rational dress standards for young women.[2]

Analysis of students' wardrobe cost.—The total cost of the wardrobes owned by 40 senior and graduate women students in Teachers College (1920-1921) ranged from $132.45 to $1319, with the median costs $515 and $523; for half the group the wardrobe costs were between $369 and $669. These costs represent the original purchase price or amount of investment in the entire wardrobe owned—*they do not represent the annual cost of clothing.* These total costs of wardrobes were analyzed as to the percentage costs of the various divisions of the wardrobe, as underclothing, hosiery, etc., for each student; the range of percentages for each division of the

[1] *Girls Clothing Contest.* Texas High Schools. Plans for 1919-20, Dept. of Education, Austin, Texas. Suggested Clothing for the High School Girl, College of Industrial Arts, Denton, Texas, 1920.

[2] National Board, Y. W. C. A., New York.

wardrobe and the median percentage spent for each division were determined as given in the table below. The median percentages for each division are particularly significant as indicating, approximately, the proportionate cost of different parts of the wardrobe owned and are as follows: protective garments, 20 percent; suits and other outer garments, 40 percent; undergarments, 6 percent; night garments, 3.5 percent; shoes, 8 percent; hosiery, 2.4 percent; hats, 6 percent; gloves, 1.8 percent; collars, .8 percent; miscellaneous, 8.9 percent; cleaning and care, 1.7 percent.

	PROTECTIVE GARMENTS, WRAPS	DRESSES, WAISTS, SUITS	UNDERGARMENTS	NIGHT GARMENTS	SHOES	HOSIERY
Minimum .....%	12.3	16.2	2.9	1.2	3.3	1.2
Median .....%	20.0	40.3	6.3	3.5	8.0	2.4
Maximum .....%	47.8	59.3	22.0	10.6	18.2	4.0

	COLLARS	HATS	GLOVES	MISCELLANEOUS	CLEANING AND CARE
Minimum .....%	.2	2.8	.2	.5	.3
Median .....%	.9	5.9	1.8	8.9	1.7
Maximum .....%	4.4	12.1	6.2	23.0	4.6

Students' annual clothing costs.—Annual maintenance cost of clothing for 34 women students, seniors, and graduates in Teachers College in 1920-21, varied from $101.95 to $1323 with the median cost, $189-$213. For one-fourth of the group, the cost was under $175 and for one-fourth over $320, so that for half of the group the annual cost was from $175 to $320. A group of four had costs of from $922 to $1323, due to a large item for furs. These figures were all estimates of annual wear and tear or of values used up.

The hat is pre-eminently an annual replacement good in the wardrobe. If nothing else is bought new this article will likely be bought. Thus in a group of 15 professional women

studying in New York in February, 1921, 15 had bought a hat in the preceding six months, 12 had bought shoes, 4 had bought suits, and 3 had bought coats or overcoats. The range of price on the hats at the time was from $5.00 to $25.00 with $10.00 as the median cost.

Knowledge of what one's clothing costs varies of course. Of 20 college students in home economics, 3 said they made definite plans in advance as to the amount they would spend for their clothing, and of the others half made no budget allowance but did keep account of clothing as purchased and the other half felt that they could reconstruct from memory an approximately accurate schedule of clothing items purchased and their costs.

Ready-made versus made-to-order.—A group of twenty teachers were asked as to their preferences between a ready-to-wear service dress and one made-to-order, with regard to certain characteristics. The preferences varied as follows:

	NUMBER PREFERRING READY-MADE	NUMBER PREFERRING CUSTOM-MADE
For an exclusive garment	2	18
" a fabric with good wearing quality	3	15
" a novelty fabric or color	14	4
" extreme new style	15	4
" moderate style	12	8
" something to wear several years	3	14
" elaborate in type	13	6
" simple in type	9	10
" all-around value, if cheap in cost	12	5
" " " " moderate in cost	11	8
" " " " expensive	4	14

Ready-made garments were prefered by a majority if one were seeking a novelty fabric or color, an extreme new style, a moderate style, an elaborate type of garment, or an all-round value if cheap or moderate in cost; on the other hand, the majority preferred a custom-made garment if the choice was in terms of an exclusive garment, or a fabric of good wearing

quality, or something to wear several years, or an all-round value if an expensive garment were to be sought.

Summary.—Clothing gives physical protection, is a source of esthetic satisfaction, and has relations to occupation, social life, sport, and other activities. Many factors are working for the better clothing of the family—industry, education, consumer's information, legislation, dress reform, and various social movements. Clothing standards are determined partly by income and clothing expenditures require from one to two-tenths of annual income; and the total cost of the wardrobe owned usually equals in amount from one-fifth to two-fifths or more of the income. Clothing economy involves wise selection, care and use. Home sewing will remain a productive art in the home, but shopping intelligence is increasingly important.

ADDITIONAL REFERENCES.

Denny, Grace G. *Fabrics and How to Know Them.* Lippincott, 1923.

Woolman Mary Schenck. *Clothing, Choice, Cost, Care.* Lippincott, 1921.

Woolman, M. S. and McGowan, E. B. *Textiles.* Macmillan, 1921.

CHAPTER XI

CLOTHING—MATERIALS AND MARKETS

This chapter discusses the materials which are used for making fabrics and the steps necessary to safeguard consumers' interests. The clothing market is analyzed as to types of stores, including department stores, specialty shops, mail-order houses, and others. Special social problems as of waste, of fashion, and of the ethics of dress are also considered.

The materials of clothing.—Clothing is made of four standard fibers, two of vegetable origin, linen and cotton, and two of animal origin, wool and silk, each with distinctive qualities and hence particular uses. There are also three minor materials: jute, occasionally used in novelty dress fabrics; ramie, an Oriental fabric material used as a linen substitute in ramie linen; and artificial silk made of cellulose.

Wool (sheep's hair) has a characteristic felting property due to its scale-like structure. This causes the well known shrinkage of woolen cloth—heat and water open the scales and they then tend to interlock, thus shortening; if the wool is rubbed while being washed it tends to further shrinking. Due to the structure of wool, such fabrics have a natural elasticity. The wool fiber absorbs dye stuffs into its central canal—hence dyed wools tend to be fast as compared with cotton or linen.

Fabrics made of wool include: "worsteds," made of a combed wool yarn in which the fibers are worked out straight and twisted hard, so that the fabric has a firmly woven hard surface and gives long wear and service (with the only drawback of becoming shiny with wear); "woolens," a fabric in which the fibers are twisted loosely into a yarn and woven so as to give a soft-surfaced fabric which has not the durability of the

hard-surfaced worsteds. "Shoddy" (wool fiber which has been recovered from old woolen fabrics or from "rags" and tailor shop cuttings, as distinquished from new wool) is often unfairly disparaged; "good shoddy is better than poor wool." It is essential that shoddy, or reworked wool, be used since there is not enough new wool produced to meet the annual demand for spinning.

Cotton is the fine down of hair attached to the cotton seed, and is a flat ribbon-like fiber with thickened edges and screw-like twists, 150 to 400 to the inch, that make spinning possible and give elasticity, but less than that of wool. Dyes are deposited on the outside of the fiber, so that cotton fabrics do not have the deep, rich colors seen in wool. Cotton shrinks in water, but is not injured in the laundry process even with long boiling, and takes and holds starch well. Mercerized cotton is produced by treating yarn or cloth under tension in a bath of caustic soda—it becomes stronger and highly lustrous so that it is often used as a substitute for silk or linen. Cotton cloth has many protruding ends of the fibers and there is a natural oil or wax on the fiber so that it readily collects dirt, three times as much as does linen, it is estimated.

Linen is the long, smooth, lustrous, bast fiber from the stalk of the flax; it does not take nor hold dyes well. It has a smooth surface and is free from natural oil, so that it is little likely to pick up dirt, and soil is easily removed. Because of their high lustre, linen fabrics are prized for table and other uses. Its power of absorbing water, and giving it off rapidly by evaporation make linen the desired fabric for toweling. Because it conducts heat, a linen fabric feels cool to the touch, and so is suitable for summer wear.

Silk, obtained from the cocoon of the silk worm, is a stiff, non-lustrous fiber naturally, but when the gum covering of the fibers is boiled off, it becomes highly lustrous; this sheen of silk is its precious quality, which manufacturers imitate in mercerized cotton and in making imitation silk; this leads also to "extending" real silk by using adulterations with it or weight-

ing it with mineral salts to make it appear heavier than it is. Silk takes and holds dyes, since, as in wool, they effect a chemical change. The surface of silk is so smooth that it sheds dust and keeps clean. Cheap silks, unless bought frankly for a short-time service, do not give good value; the deterioration of weighted silks while held in stock makes it expedient to buy silk "bargains" cautiously.

Fabrics.—The textile industry has produced from these fibers, used either singly or in combinations, a wide variety of fabrics; some of these have long been standardized in the trade, as cotton sheeting, linen huckaback toweling, wool serge dress goods, silk crêpe de chine; there is also a wide range of novelty fabrics which enterprising manufacturers constantly design and produce. Fabrics differ not only as to their component fibers, but as to the quality and length of the staple or fiber, as to the design as effected by the arrangement of threads in the weaving, and as to the surface finish given the fabric and in other ways, so fabrics are made that have different utilities as to color, weight, thickness, warmth, durability, tensile strength, elasticity, etc.

It is the business of the textile manufacturer to make different fabrics suited as nearly as possible to different use; it is the business of the user to know his needs and with the cooperation of the salesman to select the fabric most nearly meeting his needs. Salesman and consumer alike need more information than they have at present regarding different types and qualities of cloth. One can learn the chief staple fabrics and then judge novelty fabrics in terms of them.

Standard materials are safer to buy than novelty fabrics; there is less likelihood of fraudulent manufacturing or trade sophistication; the materials will be handled on a narrower margin of profit, giving the purchaser a larger fabric value per dollar expended; the consumer can usually trust his own judgment further in weighing the value of a standard fabric; once purchased it will suffer less from obsolescence, and often because of standard weaving will wear better than novelties

which may be produced by a mechanical arrangement of the threads in weaving that produces a weaker fabric.

Novelty fabrics [1] are expensive because: first, of the special costs of design, in that new ideas must be constantly developed; next, the higher cost of manufacture, since machinery must be adjusted for the particular product; third, the higher cost of merchandizing from wholesale channels through to the retail handling, since buyers must be persuaded, and the product is perishable in the sense that it may not take at all with customers, hence the novelty that does succeed must carry the costs of those that fail to win favor. Having purchased novelty fabrics, one usually gets a shorter service, either because of material conditions in the manufactured product that give it a briefer life, or because of its being a novelty the wearer soon tires of it and retires it before extracting from it full possibilities of use, its place being taken by some other novelty fabric. This does not mean that novelty fabrics are to be tabooed, but that they are to be judged in the class of luxury goods rather than as necessities and used intelligently, if at all. They contribute not a little to the snap and sparkle of life. Dollar for dollar they give a less extensive service than do standard fabrics, but the service rendered is a different one. Novelty fabrics which last but a single year are like luxury foods in the budget; none but those of liberal income can well purchase them.

Fabric sophistication.—Textile sophistication is practised upon the purchaser in the following ways: (a) By entirely substituting one fiber for another; (b) by adulterating a fabric with a cheaper fiber; (c) by finishing a fabric to appear like a more desirable one; (d) by weighting the fiber or the finished cloth with some material absorbed or held in the meshes. With cotton, deception is practised by sizing and by finishing with the appearance of mercerized cotton, wool, linen, or even silk. Deception is practised with wool fabrics by using a smaller or

[1] See also Baker, Charlotte Gibbs, "Novelty Versus Quality." *Journal of Home Economics*. 1916. p. 191.

larger proportion of cotton, and passing off the union fabric as all-wool, and by passing off the products of cheap wool and of shoddy or remanufactured wool as a high grade product. Since linen is expensive, it is adulterated with cotton, by imitating linen yarns, by mercerizing cotton, by finishing cotton like linen, etc. Jute and ramie occasionally occur as adulterants. Silk, the most expensive of the original fibers, is commonly adulterated by weighting, sometimes with sugar, gelatin, or paraffin, but more usually with salts of iron, tin, or lead, a process that greatly reduces the life of the fabric. Spun silk (silk waste) is sometimes used where reeled silk is indicated; and artificial silk and mercerized cotton are often sold under the silk name.

Some of these practices are explained by the trade "necessity" of putting upon the market goods at a cheaper price that look like more expensive goods; and, in passing, one may acknowledge a possible service through promoting democracy in dress thereby, save that an equality based on fraudulent representation does not seem desirable. A further explanation is that with rising prices the substitution of cheaper fibers for more expensive ones makes it possible to maintain the price level of a product, say men's $35 suits, although the product may gradually become relatively a poorer one; this partly accounts for the use of cheaper grades of fibers, and for an increasing percentage of cotton over wool in a union fabric.

How far sophistication goes is indicated by an exhibit before a Committee of Congress in 1913—and probably it could be duplicated to-day—of a staple serge sold as "all-wool," which was 32 percent cotton, and a "white cotton goods," which was 54 percent by weight of sizing. An investigation at the University of Toronto of forty textiles bought from four firms (1920) showed that 15 percent of them were not what they were represented to be.

Textile labels.—All textile sophistication is passing off one thing for another. This could be checked by a system of honest labeling. Indeed there is already a counter tendency in the

trade, namely, to label textile fabrics and goods accurately as to fiber, and as to percentage combination in union goods, and some manufacturers are promoting this system.

These trade practices have given rise to the popular demand for a textile label law which will require honest descriptive labels on all fabrics and goods manufactured from them, comparable to the pure food label; and several bills have been before Congress at each of recent sessions, more or less drastic in their requirements of a descriptive label on textile goods: but so far no law has been enacted. There are ancient textile certification laws; for example, England in 1344 provided for "alnagers" to weigh and measure woolens and place their seal upon them, and in 1665 attempted to check stretching, deceitful weights, and other "deceivable workmanship." England has had since 1881 a "merchandise marks" act, requiring that, if merchandise be labeled, the label must be accurate and not misleading, but not requiring that labels be used, and this has been proposed in America as a substitute for drastic textile label legislation.

The textile trade has been divided in its opinion of the practicability of compulsory textile labels. Probably their feasibility may be assumed. A more important question is their utility to the consumer. The first-hand knowledge of fabrics which every person had when every family did its weaving is gone forever, yet every family now spends a sixth of its income, or thereabouts, for textile products, and the necessity of safeguarding this expenditure is obvious. It can be done partly by instruction of boys and girls in consumers' economics in the schools; but to make knowledge effective, the manufacturer and merchant will have to do their part to facilitate intelligent buying by marking goods for what they are. It is as fair a request to make of them, as to require a label giving the net weight of the contents of a package of food-stuffs. There is some state legislation in this field, such as the New York state law that "linen" collars must have at least one ply of linen, and the Louisiana "pure shoe law," re-

quiring a label to indicate the materials used in manufacturing shoes. The support by laundrymen of textile legislation has been mentioned.

The practical first step is to adopt a Federal law based on the principles of the English Merchandise Marks Act—the trade is ready to accept that—in order to make reliable the textile marks now used. Then obligatory descriptive labels can be later tried out in some limited field, perhaps in accord with the proposed consumers' textile grades.

One proposal now before Congress requires the percentage composition of new wool and of shoddy in a fabric or garment to be stated on the label. Objections have been made that this distinction is not important to the consumer and would confuse the issue rather than help. Two bills before Congress [1] are based on the English Merchandise Marks Act, requiring that labels be honest if labels are used, and these have been having the support of the majority of the trade and commercial bodies and scientific workers as well. Many consumers will complain that such a tag does not go far enough; they want to know as a matter of right whether they are getting wool or cotton, cotton or linen, 60 percent silk and 40 percent cotton, or the percentages reversed.

It may mean little to know of which textile fiber a cloth is composed; the consumer really wishes to know what quality of cotton sheeting or linen toweling he is buying. This matter might eventually be determined for standard textile products by an agreement among manufacturers defining the different grades of any standard fabric in terms of the grade of fiber used

[1] The "Barkeley bill" regarding misbranding which has had considerable support in Congress forbids "misbranding" with regard to all merchandise, not merely clothing. By its terms an article shall be deemed misbranded, if it is an imitation; if the contents of the package have been altered; if statements made as to weight, measure, numerical count, or quality are not correct; if it is branded or labeled and any word, statement, symbol, design, device, or indication is false, fraudulent, deceptive or misleading as to quantity, place where produced, materials composed of, method of manufacture, etc.; or if there is published regarding the article any fraudulent, misleading, or deceptive word, statement, etc.

in the manufacture of each grade and also the weave, weight, tensile strength, and other objective qualities—each grade to have a reasonable range of values for each significant quality of the product. Thus "grade 1" of a certain fabric, say dress serge, or "the best quality" (which is all the consumer need know about it) would have a definite technical meaning to the manufacturer, and "grade 2" or "second best" would have another technical meaning. So for other products.

Just as in buying graded canned foodstuffs, so in textiles there could be a definite scale of qualities of a given fabric to select from.

The government might help determine such fabric grades as it has done with grades of grains, cotton fiber, etc. Then graded fabrics with the grade attached on a label would make for economy throughout textile manufacturing and trade, and consumer and producer alike would benefit by being able to buy and sell more accurately than on the present basis of more or less ignorance as to real values involved.

Beginnings are already being made that might possibly eventuate in market grades of fabrics—particularly the testing of textiles under the United States Bureau of Standards.

Already the Federal Trade Commission, by virtue of its responsibility for declaring what are fair trade practices,[1] has stopped many flagrant cases of dishonest labeling of textiles, as when an all-cotton goods is made up to look like linen and advertised perhaps as "flaxite" or "linenite" to make the unwary think that it is a linen product.[2] Obligatory laws would make such information as to fabric composition at once available. Reform would best start, however, by making honest the labels that are already being used, and there is the legal basis and the

[1] The Federal Trade Commission has oversight of trade practices in both wholesale and retail trade, and a survey of its "Decisions" shows that it is constantly checking fraudulent methods of merchandising clothing, food, household furnishings, and other commodities of interest to the household. On complaint, it makes an investigation, and if it finds reasons, issues an order directing that the wrong practice cease.

[2] Merchandise Misbranding Bills. Hearings before Committee on Commerce, House of Representatives. March, 1920.

government service necessary for this step in the Federal Trade Commission.

Fabric tests have been developed in recent years for identifying textile fibers, for detecting defects, and for measuring fabric quality in terms of various uses. Some of these tests are technical in nature and require laboratory equipment, as those which distinguish the fibers and the composition of fabrics by chemical and microscopic tests, and those which measure the tensile strength of fibers or the breaking-strength of finished fabrics by special breaking machines. Other tests are so simple that they can be performed by the customer, while examining the fabric at the counter.

Textile experts have developed mechanical tests for the strength and wearing qualities of cloth, including machines for testing individual fibers and also finished fabrics, the latter by breaking cloth on the warp and the weft threads and on the diagonal in testing machines, by wear-testing by to-and-fro rubbing and by boring, and by cylinder rubbing.

Wearing tests of standardized clothing have been used to supplement mechanical tests—thus wearing tests have been used by manufacturers of shoes to test out composition soles. Results of wearing tests give data for selecting and grading materials, and for changing specifications of manufacture; thus, of 23 holes worn in a test of men's hose, 11 holes were made at the toes, 9 of these being above and 2 below; 11 holes were made at the heels, of which 1 was at the back, 4 at the sides, 5 underneath, and 1 under the heel forward of the seam; and 1 was made at the side of the leg. Such data give the manufacturer clues as to the area needing reinforcement in the construction of men's hosiery.

There has been a tendency to purchase fabrics in terms of tests. For years the United States Government has purchased textiles for army use on the basis of laboratory tests. Cloth for uniforms must not only be composed of a certain grade of wool, but the finished fabric must have a certain strength, which is demonstrated by appropriate testing ma-

chines; the cloth must be fast dyed against fading in the sunlight, etc. Similarly, hosiery is purchased in terms of definite specifications, describing the fibers and yarns to be used in its manufacture, the number of picks or threads to the inch, the weight of the finished product, etc. The goods must meet these specifications as stated in the contract, and as attested by comparison with a sealed sample set aside at the time that the contract was drawn, and by means of various technical tests.[1]

Large institutions are finding it worth while to purchase linens, towels, sheets, and other textiles in terms of accurate tests. Here and there in retail trade one finds a similar practice; that is, a store may provide a test bureau to check up fabric samples at the request of the consumer, or a store will sell a fabric guaranteed as to its percentage composition of wool and cotton.[2] The United States Bureau of Standards during the war, and since, has carried on certain textile tests. The Bureau has started to standardize "duck" fabrics, and plans to take up the standardization of sheeting, for which the Bureau hopes to establish standard test methods.

The desirable goal is that all staple fabrics of various kinds should be graded as to their important characteristics, looked at from the point of view of the consumer's interests, and that labels stating the grades and values should be placed upon materials, so that the purchaser can inform himself and buy with accurate knowledge. As far as staple fabrics are concerned, it would seem possible to determine market grades in much the same way as these have been established for agricultural products, and if this were done, purchasing by the ultimate consumer would take place upon a definite basis of fact. Novelty fabrics would be more difficult to grade, but doubt-

[1] See specifications for purchase of hosiery, uniform cloth, etc., U. S. Army; see Winchell, Florence, "Textile Testing Laboratory of U. S. Army at Governor's Island," *Journal of Home Economics*, 1911, p. 240.

[2] Weirick, Elizabeth. "Training the Textile Chemist." *Journal of Home Economics*. 1921. Pp. 430-431 describe a laboratory for a commercial firm.

less they could be described somewhat in terms of grades that would be established for staple fabrics.

Technical tests may be more largely used by manufacturers in securing a good product, and they may also be employed as a basis of influencing consumer's choice. The Silk Association of America has given publicity to the value of silk sewing of seams in clothing with its slogans, "Look to the seam," "Is it sewed with silk?" and quotes the results of tests of silk versus cotton, made by a commercial testing company, which showed, for example, that white silk, size A, was 47 percent stronger than white mercerized cotton of the same size when used for seam sewing.

Consumers' textile grades.—The following tentative suggestions are offered as to the basis of manufacturers' grades:

Hosiery might be graded as cotton, mercerized cotton, wool, silk, vegetable silk, lisle, etc.; then for each fiber, standards might be set for weight, number of yarns to inch, and grade of fiber used. This is done with cotton hosiery bought by the United States Army, as has been noted.

Blankets, by weight per square yard and by percent of cotton and of wool in the composition.

Suitings and overcoatings, by standard type of fabric (serge, worsted, etc.); by weight per yard, grade of wool fiber used, and percentage of cotton if any.

Cotton fabrics, by standard type of fabric (nainsook, duck, etc.) made according to specifications; by weight per yard including percentage of weight which is sizing or finishing; by grade of cotton fiber used.

Silks, by standard type of fabric (crêpe de chine, etc.); by type and grade of silk fiber used; by weight of fabric per yard, including percentage of weight filler which is added to the silk fiber; in union fabrics, by percentage of weight which is linen, wool, or cotton, etc.

Linens, by standard types of fabric, by weight per yard, and percentage of sizing in weight; by grade of quality.

Grades, to be called No. 1 (or best), No. 2, No. 3, etc.,

based on such technical conditions as the trade might determine, could probably be established. Like the physician's prescription which the patient does not necessarily understand, such grades would guide the layman's action in a technical field. Textile trade associations might well consider the possibility of establishing such grades. Prices would be adjusted according to the grades.

What grading of textiles might mean is indicated, in part, by the durability standards which Dr. Hausman established for furs.[1] Taking sea-otter fur as a standard of 100 points, some of the items in the scale are: beaver, 90; fox, natural, 40; fox, dyed, 20-25; hare, 5; mink, 70; muskrat, 45; seal, 80; squirrel, gray, 20-25. Dyeing reduces durability. This scale illustrates the standardization idea—it enables a consumer to buy intelligently in regard to the wear likely to be secured. Similar scales should in time be available regarding standard textile fabrics.

The textile standardization committee of the American Home Economics Association, appointed in 1919, is working to establish standard grades for a limited number of staple fabrics and has initiated wearing tests of standardized petticoat fabrics; its tests are just now being organized by cooperation with the National Research Council and the United States Bureau of Standards. The committee plans [2] to establish minimum standards for definite fabrics, based on manufacturing specifications and on wearing and laboratory tests, and to mark fabrics that meet or surpass these standards, either as equivalent to or as surpassing the standards. Meantime the committee has carried on a survey of customers' choices of fabrics to determine which are the more important ones to standardize.

Consumers' choices.—The "purchasing habits" of consumers of textile fabrics have been shown to run in relatively narrow grooves, which renders more practical the proposal to

[1] Hausman, Leon. *Scientific Monthly*, January, 1920. Summarized in *Journal of Home Economics*, 1921, pp. 40-41.

[2] *Journal of Home Economics*, 1920, pp. 101, 491-495; 1921, pp. 600-603; 1922, pp. 543, 544, 593.

standardize and grade staple fabrics. The Textile Standardization committee has collected significant facts, some of them as follows:

More than nine-tenths of all fabrics used by groups of typical women are comprised among 35 different fabrics of wool, cotton, silk, and linen.

Wool service dresses, with 1144 choices registered, were represented by only 34 different fabrics distributed thus—serge, 55 percent of cases; tricotine, 11 percent; jersey, 10 percent; poplin and broadcloth, each 5 percent; and gabardine and velour, each 4 percent; so that seven wool fabrics represented 94 percent of the wool fabrics worn.

Silk fabrics (for service dresses, underskirts, underwear, coat linings, dress foundations) with 1612 choices canvassed were represented by 34 materials, of which satin including messaline had 28 percent of the choices, taffeta 22 percent, jersey and crêpe de chine each 9 percent, and others less—a total of eleven silk fabrics representing 94 percent of all silk fabrics used.

Cotton fabrics were represented by 36 different materials in 1229 choices, of which nainsook had 15 percent; sateen, 14 percent; longcloth, 12 percent; muslin, 11 percent, etc.—14 cotton fabrics representing 93.5 percent of the choices.

Therefore seven wool, eleven silk and fourteen cotton fabrics represented about 94 percent of all fabrics used, and these fabrics would be worthy of first consideration for standardization.

Branded textile goods.—One of the most pressing questions for the consumer of textiles and ready-made clothing and personal furnishing goods is the question whether we shall favor merchandise bearing definite brands, that is, exclusive identification names. Shall we buy a pair of "50 cent hose" or shall we ask for the "Wear-for-ever" brand, or the "Never-a-hole" or some other mystic name to which we have been introduced by advertisements on bill boards and in magazines. Some brands are established by original manufacturers, some

by wholesalers or jobbers who buy the product of a mill and put a name upon it, some brands are established by large retailers. The theory is that a brand stands for a stable unchanging quality, so that having once purchased an article of a certain brand and found that it gives satisfactory service, one can by means of the identifying brand buy precisely the same quality and repeat the experience. From the consumer's point of view, such a system, if honestly administered and if goods are sold at fair prices, would have everything to commend it. If the quality of a branded article is always maintained uniform, that alone, provided the price is not higher than the unbranded article, would probably hold the consumer's trade; if the price is higher, however, and the quality no better, then it is dubious whether the consumer can be permanently interested in a brand of goods.

Are branded textile products good goods? No such statement can be made, even in a general form. Branded goods may be good or relatively poor; a customer who knows quality can in most lines get a product equally as good as and sometimes better than the branded product at the same or even a lower price. One difficulty of judging branded goods is that "the moment a taffeta skirt or certain kind of serge cloth is extensively advertised, there always develop pirates who put something on the market at a lesser price which they say is just as good which often is not so good."

It has been suggested that consumers' organizations might experiment in registering formal approval of desirable brands, the approval to stand so long as quality is maintained. This would be something of the nature of the work of Household Testing Bureaus with household appliances. Such action would seem to play into the hands of the national advertisers and make harder the road for the non-brand producer; the young firm producing branded goods would however benefit by such a consumer's recommendation since such aid would help it to get established. On the whole the plan seems worth trying.

A student of men's ready-made clothing says that "clothing

of competing brands has approximately the same value as regards material and workmanship, with the slight exception that the larger houses, because of large scale economies, can afford slightly better values. But this slight difference is not evident to the consumer. Necessarily, then, much clothing is sold by salesman to retailer on the basis of talk." [1]

The function of brands within trade is another matter. They are being vigorously urged these days as a merchandising device to tie together certain factors in the trade, for example manufacturer and retailer, or wholesaler and retailer, in addition to their hoped-for-function in tying consumers to a definite product.

Mr. Parlin's investigation in 1912 [2] of the attitude of 394 retail merchants to nationally advertised branded goods showed that 67 percent of them had a favorable attitude toward handling such branded goods in their stores, 6 percent were neutral, and 27 percent were unfavorable to the proposition. In 1921, 182 department stores stated their atitude as follows; 65 percent favorable; 17 percent as favorable with reservations; and 18 percent unfavorable—showing a growth in the sentiment for brands during the preceding decade. The objections to brands included: the fear that having established a local trade for a national brand, the manufacturer might transfer his local agency to another house that would give better terms; the preference that large retailers have for their own private brands instead of manufacturers' brands; the relatively smaller profit on nationally advertised brands; questionable quality of certain national brands; coupons given with some national goods. Of fifty-six jobbers in various parts of the country consulted in Mr. Parlin's study, 30 favored handling nationally advertised brands, 6 were neutral, and 20 were unfavorable. The

[1] Gutwillig, Victor. "Manufacture of Men's Ready-Made Clothing," MS.

[2] Pamphlets: *Merchandising of Textiles, The Manufacturer and Retailer of Branded Merchandise,* and MS., *Textiles—Retailing and Jobbing,* investigation 1911-12, by C. C. Parlin, and MS., *Attitude toward Branded Merchandise* —1921—studies made and published by Advertising Department of Curtis Publishing Co., Philadelphia.

jobbers often have their own brands, of course, and for this reason may have opposed handling manufacturers' brands.

For the consumer, brands in textiles have yet to prove their case. The fact that a certain mill turned out three competing brands of knit underwear, all made on the same machines and of the same materials, but each advertised by a wholesaling firm as the best brand, makes the consumer smile. A knowledge of textiles will still enable him to buy to advantage without reliance on the identification brand. We have one survey of consumers' knowledge of branded fabrics: Miss Phelps in her Minnesota study discovered only two trademarked brands out of 1150 instances of wool used for service dresses, and 30 from over 750 instances of silk.[1]

The clothing market.—There are two divisions of the consumer's clothing market, that for cloth or fabrics which may be purchased and made up into clothing, and that for finished articles of wearing apparel. The fabric market is supplemented by notions and dress findings of all kinds and the stores catering to it include the great department store, the dry-goods store, the neighborhood dry-goods, notion, and furnishings store; the ready-to-wear market includes certain sections of the department store and of dry-goods stores both central and neighborhood, and specialty stores as for sale of men's suits, women's hats, shoes, etc.

The department store.—The analysis of the retail textile market made by Mr. Parlin [2] indicates that the department store has grown up in response to the shopping woman's desire to compare prices and values on all important purchases such as ready-made clothing, dress goods, high grade underwear and dry goods of all kinds; while "convenience goods" as groceries, and minor items of clothing as children's stockings, which may be needed for immediate use are bought at the most convenient place without a comparison of values, as at the suburban

[1] Phelps, E. L. "A Study of Clothing Purchasing Habits." *Journal of Home Economics,* 1920, p. 494.

[2] *Op. cit.* See also, Nystrom, *Economics of Retailing,* chapter on department store, and bibliography.

or neighborhood dry-goods store and grocery store and at rural general stores. There are also to be distinguished "emergency goods" which some unexpected happening renders immediately necessary and which therefore tend to be sold in the suburban or neighborhood drug store rather than at the store at the center of the city. The department store or other large well-stocked stores in the central districts of cities specialize on "shopping lines," or goods so important as to require thought and permit of delay until such central stores can be visited. In shopping lines there is always competition between different stores, for the shopper wishes to make comparisons between different offerings so that there is never one department or central store in a city but always three or more. "In cities up to 100,000 population there tend to be just three stores of importance although occasionally a fourth store merits consideration. After passing the 100,000 mark the number is increased to four, five, six, or at most seven such stores. In only New York, Chicago, and Boston are there more than seven department stores that do an annual business of over $1,000,000 each!"

A real shopping center is likely to have three stores, and in larger centers the stores tend to increase in volume of trade rather than in number. In department store business, in 1912, the normal expenditure per unit of population was about $30.

Mr. Parlin classifies cities from the point of view of the retail textile market, as "suburban" cities or those which lose more trade in shopping lines to another city than they acquire from their own outside territory, and "metropolitan" cities which are centers that draw in more shopping trade than they lose. The distinction is not one of size, but one of the reaction of the woman shopper—does she trade in her own community for those things on which she wishes to compare values, or does she occasionally at least go to a larger city? The stores already existing in a town, nearness to a larger place, means of transportation—as the trolley and auto—character of popu-

lation—as American and foreign, industrial, etc.—are among the factors determining the development of shopping centers. Suburban cities from this point of view of shopping may be distinguished as (1) industrial or those which have local industries, and hence a civic and industrial unity, and which therefore tend to develop their own shopping centers; and (2) as residential, or those in which the inhabitants go elsewhere for work, and hence are more likely to trade elsewhere. In a thoroughly Americanized residential suburb, there is less likelihood of finding a shopping center than in a foreign suburban city.

A distinct grading in department stores seems to appear when there are six or more stores, part of them catering to middle class trade and up, and part to middle class trade and down. A customer usually trades in one group of stores or the other, but not in both types.

The volume of all business done by all department and large dry-goods stores in 1912 was estimated to be about $1,642,000,000—which was also estimated to represent the total dry-goods and ready-to-wear business in places of more than 2500 population. The amount of textile and clothing trade in smaller places and rural stores was estimated at $451,000,000, making the total dry-goods and ready-to-wear business of the country about $2,094,000,000. The per capita expenditure for textiles and clothing for the 100 largest cities was estimated at $30.94; the per capita for all urban population, $28.52; for all rural population, $18.31; and for the total United States, $25.46.

The department store originally based its sales on low price, and accordingly special cut-price sales were featured, many of which were based on fictitious values; but among better stores there has been a tendency to emphasize quality and service as permanent factors in securing trade and when special sales are arranged to make them bona-fide "mark-downs." Special sales seem to have a legitimate function in stimulating trade in the lean months of the year. The prosperous trade seasons are from March to June and from September to December,

hence the midwinter and midsummer sales which help to stimulate business and meet overhead costs.[1] Special sales, Mr. Parlin believes, will continue but they will be less important as the woman shopper watches quality more carefully.

The shopper has in her purchases struck a balance between stores at the trading center with their opportunity for comparing values of important purchases—that is, for shopping around—and the nearby store with more restricted lines of convenience goods. Part of her trade goes to the central larger store; part seems to be held by the smaller neighborhood store. Will the large central store still further displace the neighborhood store in handling convenience goods? Some department stores have a grocery department but, as Mr. Parlin points out, quality of goods, ease of ordering, and promptness in delivery, are the essentials in the grocery trade and the neighborhood grocery store is in a position to render this service. High priced jewelry has not gone into the department store, and although the cheaper jewelry trade has done so, there seems little likelihood that the department store will take over the more exclusive trade. Furniture may be increasingly handled in department stores since it is a shopping line, but hardware as a line of men's purchase will probably stay in specialty stores, except for lines of interest to women, or to men and women shopping together, as in the case of ranges.

Can department stores successfully handle men's clothing and furnishings? Yes, Mr. Parlin's investigation shows, as far as women serve as buyers or assistant buyers of men's goods. The success of men's departments varies sectionally—East and North, men and women cooperate more than they do in other sections in purchasing each other's clothing, and men's clothing departments are successfully conducted in department stores; probably 75 percent of men's underwear and furnishings are there sold to women shoppers. In the South, there

[1] Mr. Parlin gives an analysis of monthly sales in a ten-million dollar store, showing the percentage of total sales by months to range from 5 percent in June and August, and 6 percent in February and September, to 10 percent in October, 11 percent in November and 14 percent in December.

are very few successful men's departments in department stores, since the women do not buy for the men, nor do men cooperate in making selections for the women. In the West, departments for men's furnishings are successful parts of department stores, but departments handling men's clothing are not successful. In some cases, men's departments have been successfully segregated by department stores, where men buy by themselves without women's assisting or dominating the purchases.

Mr. Parlin's conclusion is that the department store will likely hold its own against the specialty shop; that some further development in department stores of men's goods for women purchasers, of furniture and of articles that are bought by the man and wife together, is possible, but that no considerable increase in per capita expenditures in the department store can be expected unless it takes up extraneous lines such as groceries, meats, and men's clothing.

Other types of stores.—The neighborhood or convenience store may be either a general dry-goods, notion, and furnishing store or it may be a specialty shop. It may not carry the more expensive fabrics, or a variety of dress goods, or ready-to-wear items of more expensive quality; in such cases shoppers will go to the central stores and compare qualities.

The clothing specialty shop which carries but a single line of goods exists in the following and probably other lines: men's suits and overcoats; women's suits and coats; shoes; men's hats; women's hats; women's waists; men's shirts; hosiery; lingerie; gloves; and men's furnishings.

"Chain stores" have not entered the clothing field to the same extent that they have the food trade. What might be called a chain of dry-goods stores was organized by the Claflin Company, well known as wholesalers in dry-goods, and a few local chains of men's clothing stores and men's furnishing goods are operated in the largest cities. There are a number of manufacturers' chains in shoes, hats and other special lines—as Douglas, Regal, and other shoes, Danbury and other hats.

"Chain Shirt Shops" are another organization operating in different cities.

Direct selling of clothing by the manufacturer has been tried in special lines, as when local stores have been organized by certain hat and shoe manufacturers and a few suit and cloak manufacturers. Direct selling by mail has also been tried by a few manufacturers as of rain coats, hosiery, and in a special line such as maternity goods. Many companies will sell "samples" by mail, or "sold by mail if your dealer does not have it." The amount of direct selling is evidently very small and manufacturers usually reach the customer through the wholesale trade to a local retail merchant.

The professional shopper who executes purchases for private consumers on order is a factor in metropolitan centers. The commissionaire, as she is known, builds up her clientele by personal recommendations from one person for whom she has done business to another and also to some extent by advertising. She buys as a free lance at any store where she has arranged to secure a commission. This commission is her compensation. Such a service is a great convenience to those persons living at a distance from large cities who are anxious to have the advantage of the metropolitan market.

Mail order buying.—The catalog or mail-order house finds its customers in communities where access to stores that carry adequate shopping lines is not possible. Mail order business in textiles and clothing is handled largely by a few houses that specialize in this line. Department stores which have tried to develop a catalog business in addition to their local business have usually found it impracticable to mix the two methods; but most large department stores maintain a mail-order department for the benefit of their regular customers and of others desiring to place orders in that way.

There are two ways in which ready-made clothing is purchased by mail, either through mail-order catalog houses or tailors to the trade. In buying from a mail-order catalog house the purchaser measures himself and sends in an order which is

filled by parcel post or express. There is the risk of mismeasurement and of buying a color or fabric one does not desire, but the best mail-order houses now test fabrics as to the percentage of cotton and wool, use colored illustrations of fabrics in their catalogs, and "guarantee to fit and please you perfectly or we will return your money"; and they carry out these promises to the letter on the policy that the "customer is always right." The clothing carried by the mail-order houses seems to comprise cheap and moderate grades of clothing of all kinds for men and women, including all accessories, so that a wardrobe complete to its last item can be secured from a mail-order house.

The "tailor-to-the-trade" is a method of selling coats and suits to measure through an agent in the local community who has a sample book of fabrics on hand for inspection by the prospective customer. The agent measures the customer and sends his order to the manufacturing company. The company makes up the garment and forwards it to the local agent, who gives the customer a try-on and if necessary arranges for alterations.

Cash, credit, installment buying.—Most large dry-goods and clothing stores seem to encourage charge accounts; the consumer finds them a convenience in purchasing ahead of his pay envelope, and the privilege of sending goods home on approval is a practical advantage in selecting clothing. The occasional all-cash store usually gives slightly better values.

Installment buying of clothing, while not so common as installment buying of furniture, is practised by the more shiftless families in cities. Where practised, 20 to 100 percent excess price is paid. A parallel expedient is the temporary pawning of clothing which Mrs. More found in her Greenwich Village families cost 3 cents a week on $1.00 borrowed.

The special sale is a characteristic of the textile trades which is partly justified from the view point of consumers' interests but may also be employed as an exploiting agency. The clothing trade is seasonal, since the demand for clothing is

seasonal; this leads to "opening sales" at the beginning of the season, when prices are firm and high and the consumer finds his advantage in the wide variety and full stock of sizes and patterns, but pays for the advantage. Later come "special sales" of selections that are moving slowly and on which a price reduction is offered in order to move them; such are the after-Christmas suit sales. Sometimes the advice is given to wait for these bargain sales—but, obviously, it is advice that cannot generally be followed.

One "special" price on a limited line of advertised goods to draw customers to the store in the expectation that they will also buy other goods on which prices have not been reduced, has been a common merchandizing device. The sophisticated consumer can take advantage of these "leaders," particularly if she has a list of clothing needs drawn up and kept in hand to guide her purchasing as these special opportunities arise.

The "basement," or other special sales department in department stores, to which slow-moving goods are transferred at a lowered price in connection with which services, such as alterations, or deliveries, may be curtailed as the price is cut, is a legitimate device, which works to the benefit of both merchant and consumer.

Demand for men's clothing.—The consumers' demand for clothing has been classified by Gutwillig[1] into three types, a general demand, a class demand, and an individual demand. General demand is a demand for clothing as such. All men wear suits. One suit differs little in its essentials from another suit. Thus, there are consumers all over the country who require the product of the clothing manufacturer. The market for suits, then, is national in scope. Class or group demand varies in the degree of radicalness which the consumer seeks in style, model, and price. Class demand depends on climate, nationality, education, social strata, surrounding influence, and age. They wear heavier woolens in the north and lighter in the south. Plaids are favored by the English. The "educated"

[1] Gutwillig. *Op. cit.*

demand more up-to-date suits, as do those of larger income, and the small town inhabitants demand less style than the large town. The older man wants a conservative model and the younger man a radical model. The individual demand differs with personal tastes and liking. One man wants a suit like his last year's suit, another man wants to look younger than he is or older than he is and all these individual choices go to make up the clothing market as it is.

Costs of men's clothing.—A well-known New York City company that manufactures and retails men's clothing published in 1920 a statement of "your money and where it goes when spent for Rogers Peet Clothes." Of every dollar received profits were only $.082; materials took $.266; labor for making and selling, .48; rent, .072; taxes, .0362; and advertising, .018. The other miscellaneous costs were: delivery and freight, .007; containers and twine, .0053; telephone, .0008; postage, .006; bad debts, 0012; "money back," .0073; printing and stationery, .005; fixture repairs and building depreciation, .0047; and insurance, .0016.

Social wastes in clothing.—The National Council of Defence pointed out certain trade wastes in requesting economies in clothing designing and manufacturing during the war, and it estimated the possible saving at from 25 to 40 percent of consumption through such measures as: avoiding excessive multiplicity of styles and using only models actually required by the trade; avoiding models having needless adornments; using cloth in which re-worked wool and cotton are in part substituted for wool, and using cloth lighter in weight; making models that require the least practical amount of cloth; reducing cloth used for samples; designing fewer fabrics and confining designs as much as possible to standard construction and standard colors; doing away with novelty fabrics; also increasing the standardization of quality, color, weave structure, and style. Some part at least of these trade wastes are recoverable in normal times.

The Engineering Societies' field study of waste in the men's

ready-made clothing industry[1] showed that the many styles put out by each firm and the numberless variety of fabrics offered for choice by retailers are largely responsible for seasonal irregularities in manufacture that, if spread over the year, would represent an average waste of 9 hours a week in the factories; and the report shows there is that much more waste due to time-wasting methods in manufacture. The sell-then-make wholesaler's policy could be checked by limiting the number of models and cloth styles; then on a standardized product, manufacturing could go on during slack seasons. One manufacturer offered 29 stock models of sack suits and 14 special models; each model was offered in 3 styles of lining construction and 3 combinations of lining material, thus making a choice for the retailer among 278,000 possible combinations. Yet the public does not really demand this variety that now paralyses the ready-made trade, for one manufacturer who offered 31 sack suit models got 78 percent of his orders for 11 of the 31 models, another manufacturer got 50 percent of sales on one model and 94 percent on 9 of his 22 models, and a third got 94 percent of sales from 11 of 43 models. One firm that has restricted its models to eight, each offered in less than 300 cloth styles, concentrates two-thirds of its sales on three of these models which it manufactures throughout the year, running its plant at nearly full capacity. Consumers if informed would doubtless cooperate in this movement to stabilize manufacturing by limiting their choices to a more restricted offering in this industry, the annual output of which is $1,158,000,000 (1919), a large part of which represents waste.

On the other hand, manufacturers who operate too far ahead of the retail season at present may suffer loss due to manufacture of styles that will not sell; and dealers' mistakes in stocking cause losses through unsalability. More stable consumers' choices would remedy both evils.

[1] *Waste in Industry.* Federated American Engineering Societies. McGraw-Hill, 1921, pp. 95 ff.

Unjustifiable merchandising costs are brought about through unnecessary advertising, excessive delivery service, abuses in connection with goods sent on approval and turned back, and the like.

Consumers are responsible for dress waste through competitive dressing to excel others, through over-buying of duplicate items, through lack of care of clothing, and through failure to use in some way the values in discarded garments. The over-emphasis upon clothing as an index of social position causes waste. Consumers are primarily at fault, though advertising plays upon this motive.

The social cost of ill health through inadequate clothing leads to great social loss.

The factor of fashion.—Ross has pointed out that fashions spring from the desire to individualize one's self from one's fellows; fashion consists of a succession of planes in respect to some feature or features of consumption; it embraces two distinct processes—imitation and differentiation, first differentiation by leaders and then imitation by the group. Fashion does not appear in a caste society, as among European peasants, and it may be restrained by sumptuary regulations. A democracy, when it is materialistic in spirit, stimulates competition along the line of fashion. Conformity to the fashionable style is more prompt and general than formerly, and the changes of fashion are more frequent. The characteristics of modern fashion as distinguished from earlier fashions are: (1) The immense number of objects to which it extends; (2) the uniformity of fashion, which knows no territorial or class limit; and (3) the maddening tempo of the changes of fashion.[1]

Fashion extends into various fields, and is cultivated by the industrial interests involved; thus, fashion in jewelry is frankly promoted by the manufacturing jewelers. The Newark, New Jersey jewelry manufacturers "submitted" a series of opinions regarding styles recently. "Diminutive designs will be the rule

[1] Ross, E. A. *Social Psychology*. Chapter on "Fashion."

in all classes of jewelry"; "brooches are assuming prominence again"; "the tendency in necklaces will be toward narrow tight-fitting effects with jeweled ornaments." [1]

Origin of fashion.—Fashion in women's dress is created by the modistes of Paris, and passes from them all over the world. Clerget explains how "each establishment decides upon a model and then selection is made from public opinion expressed at the great gatherings at Auteil and Longchamp. Each modist has a representative there and in broad daylight they make comparisons, listen to criticisms, make after-touches and the complete results of the races' told in the Paris evening papers omit the most striking act of the day: Fashion was born and a humble seamstress may have had the fortune to create it." A style once created is made current by mannequins at the race course, on the street, and in the theatre, and by actresses on the stage and at social functions. Fashion at the theater is playing an increasing rôle, and mannequins are being replaced by actresses in giving the new style acceptance.[2]

Economic aspects of fashion.—As an economic force fashion stimulates production in special lines much as advertising does. This is in part a false gain, however, for whatever the operatives gain by increased employment in fashion trades they and all other workers lose as consumers of the cheap and rapidly-deteriorating products of a fashion-driven industry. Fashion also operates to divert demand from one part of the productive field to another—but this does not mean a net benefit to business, since the transfer of emphasis in business does not mean an increase. On the contrary there is loss in such a transfer due to uncertainties both in the field that is losing and in the field that is gaining business through the subtle changes in demand due to fashion. The more frequent and the more rapid the changes the greater these trade losses. Quick and expensive changes in machinery; delayed production and hence unemployment followed by high-speed

[1] *New York Times*, Sunday, July, 1915.

[2] Clerget, Pierre. *Economic and Social Rôle of Fashion.* Annual Report of Smithsonian Institution, 1913, 755.

production, over-work, and long hours of employees; and this in turn followed by stagnation and waiting for the next turn of the wheel of fashion; goods that are turned out becoming obsolete before they are sold, and hence increasing the cost of goods that are sold—these are some of the trade costs of fashion. These trade wastes are so great that consulting fashion experts find employment who watch changes in styles and advise manufacturers in various lines how to adjust their business to the shifting modes. One such adviser was reported a few years ago to have an income of $50,000 a year as adviser for manufacturers doing a forty-million dollar business in fabrics, linings, and other clothing materials. Another of the wastes of fashion is the unnecessary quantities of material demanded by many styles; in the war conservation program, three yards of material was made the standard for coats, suits, and dresses "in place of the 3½ to 8 yards of material used," thus effecting a saving of from 14 to 62 percent.

Fashion assesses its costs upon individuals as well as upon industry, in terms of high prices for fashion goods, of increased purchasing in order to meet social competition in dressing, and of large renewal costs due to relatively poorer quality of fabrics in fashion goods, and through the losses by laying aside articles still sound and useful and attractive except that they are obsolete in style. The loss in discarding clothing includes not only the fabric loss but also that of the labor cost of the garment which must be replaced. The fashion cost of clothing or the share of retail price for which this temporary quality is responsible may be indeed greater than the cost of the material itself. The fact that large stores employ a "pricer" who determines how much a garment in the latest style will bring is warning enough of the cost of fashion to the individual.

Professor Marshall has said, "Everyone who changes the material of her dress simply at the bid of fashion sins against the spirit of art, but she also probably adds to the wreck of human lives that is caused by the hungry pining for work."

Fashion affects the cost of the individual's clothing more than that of any other object of expenditure, but it reaches directly or indirectly into all parts of the budget.

The psychological tyranny of fashion over the average person, adult, or child is a very real thing, making for unhappiness and distress, as when a person feels she cannot do this or that because her dress is out of style, although it may be entirely presentable in all other respects.[1]

Checks on fashion.—Ross points out that the hope of curbing fashion lies in the growing group that conforms as tardily and as little as possible to fashion and does so only in order not to be conspicuous; also in the rising level of intelligence which causes the desire for self-distinction in dress to seek satisfaction in other ways than fashionable dress; and finally in the increasing interest of women in business and athletics where the more standardized dress narrows the sway of fashion. The extension of fashion into "sports" clothes indicates, however, something of the influence with which we have to deal.

American women, and men too, need to appreciate certain fundamental points regarding changing modes in dress. While this policy of "off with the old and on with the new" doubtless makes dress a source of a certain kind of esthetic pleasure based on variety and change, it is to be noted that esthetic pleasure, based on sensation of change alone is shallow and meaningless, compared with that derived from intrinsic beauty of fabric and design and suitability of costume to wearer. Without, therefore, rejecting changes in mode as a source of dress satisfaction, one may point out sources of much deeper pleasure in dress, including, first, the suitability of design to the individual and to one's personality. There is a kind of personal design equation to be worked out for each individual which, once properly solved, may modify costume and remain as an element of stability for the individual through changing modes. That is, the personal element may be made a major factor in giving a

[1] Gerould, Katherine F. "Dress and the Woman," *Atlantic Monthly*, 1911, Vol. 108, p. 617.

permanence in dress-design, and the changing elements of the mode may be subordinated as of minor importance. Second, quality of fabric and its suitability to the purpose of the garment may be stressed as a permanent factor. We need to prize an excellent fabric as an earlier generation did, and, securing one or more well-made garments of fine fabric—for example a tailored suit, a fine silk gown—designed in a moderate mode between extremes of changing styles, extract a longer service from them. Finally, a recognition of practical purpose in dress at once makes against flippant changes of fashion. Business dress emphasizes this fact, and woman's business costume, while feminine, does not shift widely from one extreme to another. It has a permanent purpose just as its wearer has a useful function in life. So the woman teacher, or doctor, or nurse, or other professional worker, is successfully opposing the foolishness of fashion's whims by ignoring their extravagances and demanding clothes in a medium mode. As home work is professionalized through household-arts education and home women demand house dresses which express their professional attitude toward housekeeping and homemaking, another limiting force will affect fashion. Already women realize that extremes of fashion are unwise, extravagant, and really contrary to fundamental beauty in dress; therefore a practical rule may be derived to yield to the mode only in part, to preserve a golden mean between shifting styles, to find out what is one's own best solution of the dress design problem and use that as a guide, modifying it somewhat with the mode; finally to prize good fabrics and as one can, secure garments of solid, lasting, intrinsic quality, made in a medium mode, which by slight alterations will give service beyond a single season—in this way one can reduce fashion to its reasonable place.

Trade influence of the consumer.—The consumer's preferences are the compass of trade, and merchants are constantly studying what people want. If these consumers could in some way express their preferences more explicitly, that

would be desirable. It is difficult to see how a consumers' organization related to merchandising could be maintained unless an economic basis of direct return to the individual for his effort could be discovered. Consumers' cooperation provides such a motive, and if it ever succeeds in America it may exert an influence on the clothing industry. Fashion shows are now held by the trade in large cities for the benefit of buyers. Might not organized consumers cooperate in such enterprises, bringing their critical views to bear as well as those of profit-seeking dealers? Such opinion to be effective would have to be expressed regarding original clothing designs before actual quantity production has been entered upon.

Consumers' boycotts have not been as common in the clothing market as in the food market, but there was something like a general consumers' movement at the peak of prices for clothing after the war, and it evidently had an effect in lowering prices.

The consumer has a responsibility for conditions of production. The buyer who knowingly purchases a product made under unfair conditions is by his patronage responsible for the continuance of such conditions. Acting on this principle, the National Consumers' League and its various branches have for years endeavored to improve conditions in clothing manufacture and retailing, by expressing public approval of enterprises meeting its standards. For fifteen years the League's label was used on muslin underwear manufactured under conditions that met its approval, until the workers in these trades organized and secured good standards themselves. At a recent convention the Consumers' League resolved to promote a Federal honest-cloth bill and to urge municipal "sorting plants, clean and thoroughly equipped" in centers of the rag and shoddy industry.[1]

Ethics of dress.—The ethics of dress concerns one's relations to one's fellows as affected by dress.

One principle is to avoid dress display which attracts the

[1] *Survey* 43, p. 227.

attention of strangers and causes comment. The dress-minded person will notice costume anyway, and the attention of such a person is no criterion for the application of this principle; but most of us have slight interest in clothes, and some of us are as deadly indifferent to dress as dress-minded persons are keenly interested in it. A costume which makes many persons in an average crowd notice it, is not the costume for an average person to wear. It may do for a fashion manikin, or on the stage, or in "society" so-called. Bizarre shoes, "loud" clothes on man or woman, are objectionable.

Clothing is intended to cover the body, and abbreviated garb may give inadequate protection. The propriety rule in dress, that one should keep within the usual conventions as to covering the person, is directly ethical; its observance promotes good conduct; sometimes its observance requires that one be a non-conformist as regards extremes of fashion, when the latter sets aside protecting convention.

A complementary ethical rule is that we get for ourselves and give to others reasonable esthetic satisfaction with our clothing. There is no justification for dowdy garments on man or woman, or in soiled, unclean clothing; we owe it to our own personality to be neatly and appropriately clad. Even the dress-minded person is justified so far as he affords leadership or, at least, helps keep the social mind awake on the dress question. A due proportion of attention to dress as a source of satisfaction is good sense, which in this case is good ethics; but such a rule does not make dress-mania rational.

The rule of proportion in dress expenditure—both as regards the total family expenditure in this field, as related to other needs, and as regards dress allowances to different members of the family—is at its basis an ethical principle.

Summary.—Clothing materials are made chiefly from the four ancient textile fibers, wool, cotton, silk, and linen, but now fabricated with such cunning and sometimes such sophistication of material that even a handicraft worker who knew older materials at first hand would scarcely be able to buy

wisely in modern clothing markets. There is a demand for government-supervised descriptive labels on all fabrics and garments; at any rate, legislation providing that labels, if used, must be honest labels is entirely feasible and is already in process of being enforced and extended. There is a possibility that uniform grades of standard fabrics may be ultimately established by manufacturers, under government leadership, as we have grades in food products. The consumer's clothing market includes that for fabrics and that for finished garments, and the latter now can provide every item of the wardrobe and makes continued encroachments on the retail fabric market and on custom and home sewing. The department store is the dominating factor in the urban clothing market, but the local or neighborhood store, the specialty shop, and mail-order buying divide the field. There are large social wastes in the clothing industry of which fashion, source of many satisfactions in dress, is also most largely responsible. More rational ideas for producer as well as consumer, to be secured by education, is the hope of progress.

CHAPTER XII

HOUSEHOLD OPERATION—HOUSEWORK

The daily work and management of the household, or, as the English say, "working the house," involves important interests, and much of detail related to the general housekeeping processes. As a financial problem, it is customary to group under a single budget division called operating expenses, or housekeeping expenses, all the outgoes of the household except the cost of shelter, food, clothing, and those personal and social expenditures having to do with the personal life and advancement of the family. Hence one finds in this budget division of operation the expenditures for housework and wages, for heating, lighting and for other services as cleaning, for supplies of all kinds and for upkeep and replacement of equipment, and other housekeeping expenses. It is true that a cost-accounting might transfer many of these items elsewhere; for example, the gas bill for the kitchen range is strictly part of the cost of feeding the family; the laundry bill may be considered a part of the clothing cost, and the cost of heating and cleaning a part of shelter cost. It seems wiser, however, to have the food item in the budget include only costs of raw food materials; the clothing item to cover original clothing costs only, and the shelter cost similarly to concern only the original outlay for housing. The division of household operation, therefore, assumes that shelter, food materials and clothing are provided, and considers as part of operation expense all other outgoes necessary to make the entire household machine go.

This chapter discusses housework which is the central problem in household operation; the following two chapters treat, the first, of machinery in relation to housework and com-

mercial companies that serve the household, and, the second, of hired labor in the home.

The work of the household.—The work of the household includes: (1) the productive activities of food preparation, care of house, furnishings, and clothing, nurture of children, care of sick, etc., and (2) the direction of the household as a consumption-group. Viewed as processes to be controlled, both household production and consumption resemble work outside:—it is a question of ends and means, that is, of certain purposeful activities to be carried on, and labor, materials, equipment, and supervision brought together to attain the result desired. Certain aspects of the work of the household will be discussed briefly.

Houseworker, a solitary laborer.—The charge can be laid that unlike industrial workers, the houseworker does not work as one of a group, and that the work and worker suffer thereby. The situation is not so simple, however. As regards the hired houseworker, the charge can be accepted as a true drawback to household employment; to the average person it is not attractive to work quite by oneself especially in a situation where there is social constraint as in "service." As regards the housewife, however, the "solitude" objection is largely to be discounted. For one thing, the family with children is scarcely a solitary place. Even without children, the coming and going of husband and of guests, and contact with neighbors interrupt the long stretches of being alone. Even for the farm woman with no children, the husband's coming in at noon and the interest in the care of living things, break the solitary hours.

But where solitary work hours exist, and they do to a considerable extent in all homes, it is questionable whether the inference that they are wholly disadvantageous as compared with group work, will hold when measured in personal values. The worker apart in routine tasks has opportunity for thought and reflection; there is the opportunity of plowing deeper in the mental fields that are entered. The home woman's habit of

mulling things over has often been noted, and woman's traditional force of conviction bases itself somewhat probably on her working apart, where there is time for thought to grow. There are connections here with ethical and spiritual values for the individual family and for society. The mental product is different certainly from that obtained in the socialized working group where the husband ordinarily works and society can use this varied mental experience of men and women for its own purposes.

Is solitude hard on the home-woman and unfair to her individually? Does it occasionally drive her insane? The latter charge has been controverted and is yet to be proven. Unrelieved solitude for the home worker would be a burden grievous to be borne. But conditions affording relief already exist—work is self-controlled by the worker and whatever hours off are possible can be taken at will; the work is done at home where the worker's life is lived and where other interests center; that is, working as a solitary worker in a detached workshop would be one thing, working alone at home is quite another thing.

The housewife's permanent labor arrangement.—The ordinary employee or worker changes his place, his kind of work, etc., at will. The housewife usually does not, although our modern family ideal provides some freedom of choice as to inside or outside vocation for the housewife. This permanency of the housewife's economic relation, makes housework appear, in the minds of some writers, at a disadvantage as compared with the mobility of other work. The argument that "marriage is a trade" and hence ethically questionable because the woman enters upon a permanent labor arrangement when at the same time she enters the permanent personal relation of marriage, is no more sound than it would be to say that the farmer who marries is morally culpable; in both cases there are parallel a permanent personal relationship and an economic relationship to a person of the other sex, but the personal relationship is not normally sought in order to secure a

favorable economic relationship. The permanency of the economic relations of marriage creates certain conditions: for example, no anxiety as to tenure of position; but also absence of the competitive stimulus for improvement or production which in other occupations arises from the desire to make tenure certain. The loss in motivation due to certainty of tenure is however, more than offset by stimulating motives arising from self-directed work for one's self and one's family.

Monotony in housework.—Housework is sometimes said to be monotonous, but this charge also is not fairly laid. Any work performed ignorantly and without insight, seems to an onlooker to be monotonous; many who do housework are ignorant and tasks performed by them anywhere would seem drudgery to a careless observer. One needs but to watch a shop employee tending a machine in an endless repetition of some small task, hour after hour, to know that housework, compared with most other tasks has less of immediate drudgery and offers opportunity to change from task to task more or less at will, and gives space for the worker's self to expand.

Because of its variety housework may be mentally confusing to a tired worker. Different tasks present themselves to be done—all demand attention and many that carry vital values demand immediate attention. House work is anything but monotonous, however.

With housework, perhaps, more than in any other business, the worker may well remind herself of the chief purpose of the home as the place where good, healthy citizens are matured. Then dishwashing will not seem an everlasting inescapable monotony, but rather, the meal that was served on these dishes is providing nourishment for growth and health to the family. This, indeed, is the *summum bonum* of the housewife's work, and it may be necessary to remind herself of it often, as the inevitable round of tasks to be done appear day after day.

Housework is personal service.—Housework is, in considerable part, direct personal service, that is, work performed for the direct benefit of persons rather than to create a ma-

terial product, and in this case, it is service of oneself and others who are one's own. The material products are also of immediate benefit to these persons. Work becomes shot through with personal values, when its constant character is service of others. Moreover, this service of those whom we love is enhanced in value to the doer beyond any other possible service, unless it be that of persons in positions of large social responsibility, the social worker, the preacher, the poet, for example, who are sensitive to personal relationships extending indefinitely from person to person, and who might say "Our echoes roll from soul to soul and grow forever and forever." Yet such broadly quantitative personal contacts lack the qualitative factor that one finds in the simple home circle of "one's own flesh and blood," which is the direct experience of every parent.

Housework occurs in small segregated units, each unit being the labor required by an individual family. Even where families are gathered together in congested multiple dwellings most of the labor remains in separate units—only the heating, care of the house approach and waste disposal are usually made a common service. Out of this fact, flow important consequences: small work units do not favor the specialization of trades, the application of capital in relatively large quantities, the use of machinery and power, and the introduction of specialized methods of production, such as utilizing favorable location, developing natural resources, and taking advantage of cheap or more efficient labor; housework is a unit complete in all its particulars, and all its services must be supplied usually by one worker—save as specialization to some degree has come into larger households, and as industrialization has taken the work into specialized shop production.

The hours of work in the household are difficult of control, but amelioration of conditions demands their control as far as possible. Family living is a 24-hour process, and while routine service is to be compressed into a definite work day, emergency calls may come at any hour of the day or night. The mother

who has to rise from table to sew on Bobby's button before he goes to school, obviously needs to organize Bobby and buttons. But one is dealing with children who must learn, and with one's own whom one primarily likes to serve rather than organize or discipline although we are seeing that the organization of a child's habits is our best way of serving him. And the mother is herself learning from Bobby as well as he from her. So while efficiency rules call for an eight-hour day, schedules of tasks, routed work, and the like, even organized housework would go on with a margin of unorganized situations. While the housewife may partially excuse herself for laxness in controlling her own time on the ground that home is a consumption process as well as a productive one, she can make no such excuse for her attitude toward her household employee, who has a just claim to a standardized day as explained elsewhere. This requirement for a standardized day for the household employee must eventually react on the housewife herself, particularly so, as the children's interests broaden. In order to stabilize the family bond, she must needs enter into the children's interests, and she may therefore be led to place household tasks on a uniform basis in order to secure more time for the personal needs of her growing son and daughter; indeed giving them definitely a share of the schedule of tasks is a direct way of securing more time for family social activities for all.

The motives in housework include most of those found in other productive labor:—the enjoyment of reasonable activity as such; of activity toward useful results, or what has been called the instinct of workmanship or the creative instinct; the pleasure felt in results achieved by oneself; and the ultimate urge of acquiring the elements of a living, the compelling trio, food, clothing, shelter, which we must have or perish. The housewife stands in a unique relation, moreover, as regards impelling motives—she works immediately in terms of the family instincts to care and do for her own husband and children. No money wage intervenes, as in ordinary industry, be-

tween her effort, her product, and the enjoyment of that product; she and her family use her products, and the quality of their living depends immediately upon her efforts. Pride in their appearance, for example, has a strong compulsion upon her, since their appearance reflects credit or discredit upon her efforts. "Their favorite cake"—what a revealing example of the play of motive in driving the housewife to hours of labor.

The housewife's compensation as worker is of the same kind as that of all workers—it is the living that she enjoys, and this living she has herself wholly or in part created by her own services. The wages of her labor are not in the form of money income as is the pay envelope of her husband for his outside employment. She receives "real wages," that is, her food, clothing, shelter and cultural satisfactions of all kinds. Her husband's money wages must first be transmuted by family expenditure into food, clothing, shelter, etc., before he receives his real wages—and when he does, the remarkable fact is to be noted that he takes his share of the family living as his real pay for labor in outside industry, and she takes her share of the family living as her real pay for labor in household industry, and his pay and her pay are ordinarily identical.

The minimum real wages of the housewife may be regarded as the satisfaction of the essential physical needs, with something, at least, of the decencies of life. Even the most unskilled houseworker for wages can get her living and something over for her work—and the poorest housewife renders at least an equivalent economic service. In both cases, one may assume the housekeeping activity as that of routine labor alone, without the leadership and planning and decision-making of the "enterpriser" although the poorest housekeeping if it be self-directed has something of the enterpriser character. If the least skilled housekeeping labor commands at least a meagre living, greater labor skill will command a better living; and as a fact the living secured increases with the labor skill, and with the quality of management possessed. The trace of the management function found in even the least skilful

housekeeping of the housewife increases in relative quantity and importance in higher grades of skill; it may become the sole function of the housewife in the large domestic establishment with all work done by employees, and the housewife acting only as manager. The living secured by the housewife (provided by herself for self and family) becomes more varied, richer, better endowed as her labor-skill increases, and as her faculty as enterpriser supplements her exclusive, or almost exclusive, rôle as laborer. As in industry enterprisers tend to make a return equal to the living they could secure on wages or salary and in addition often secure extra profits—so the housewife gets minimum pay in a basic real living wage, which is increased by added labor skill and enterpriser's skill. The compensation of the housewife, like that of other workers, tends to be graded according to her skill or productivity.

In one striking respect, her real wage may be utterly at variance with her economic contribution in terms of skill—and that is in regard to its modification by her husband's economic contribution to the family. Marriage is an economic partnership—the husband does not support the family alone, the wife does not, and neither of them exclusively determines the living the family can secure. A man earning much may be yoked with a wasteful wife, and the wife who works efficiently in her productive activities may be hampered by a husband who is not a "good provider." Or both may be inefficient producers and careless consumers, or both may be efficient and careful in these two economic relations.

Professional or business organization is one method of improving conditions for the working housewife. Like the farmer she is enterpriser and capitalist as well as worker. Just as farmers form successful business organizations which improve conditions of their work, so the door is open to the housewife to organize more effectively than she has done as yet.

An organization which is already being promoted is the National Association of Women affiliated with the home bureaus

of the cooperative agricultural and home economics extension system, similar to the organization of farmers in "The Federation of Farm Bureaus." On such a basis, a powerful national organization of farm women can be easily realized. Then a similar organization of urban women might come about by federating those women who have taken vocational training in the Smith-Hughes system of home economics education. Two such organizations of housewives, rural and urban, would readily cooperate, and we would have an authoritative voice for the consumer in the organization of women trained in household management.

There is also needed a research organization of women highly trained in home economics to study such problems as that of household labor, costs, and the like in their own homes. And for this purpose college graduates in home economics, who have married and are now keeping house, might form a household research organization with local branches, open to persons of similar training; this would immediately become a most significant agency for carrying on research on household problems, using the home as a laboratory.

Learning process in housework.—The future housewife is ordinarily introduced to household duties as a small child, and learns the first steps by imitation of her own mother. Sometimes this, and the trial and error method of learning as an adult, is the only preparation for household tasks. School instruction in household arts now fortunately supplements home experience for most children. One important school method will be secured as the school cooperates with the following home-learning processes:—(a) the mother's training of her daughter in household duties which can be organized by the school in the form of home projects; and (b) the young housewife's learning by trial and error, or "by experience" which can be made more efficient as these young housewives are given an opportunity for special class instruction at the time when they are starting their homes. The school must utilize the home as its natural practice ground in teaching

housekeeping. The housewife must be lead to continue the learning attitude through life.

How much time for housework.—Mr. Leeds,[1] in his estimates secured from 60 housewives which showed an average of about one hundred hours of housework in the homes reporting, seems to have been the first to study the distribution of time in the home; and Miss Bailey (see below) did the first accurate investigation of this problem. The facts indicate a work-day that considerably exceeds the eight- or even ten-hour day. The facts now available will be presented, and the problem of the eight-hour day in the home stated.

Time required for a family of three.—A record has been made of the time required for housework in a family of three adults living in a seven-room house, which shows the annual total to be 2646 hours of work, or a daily average, counting seven days to the week, of 7¼ hours.[2] The work as scheduled includes items as follows: Work done once a year, total 11 hours; work done twice a year, total 42 hours; or, both items together, 53 hours, or 2 percent of the total; work done once a month, 75 hours a year or nearly 3 percent; work done once a week, 450 hours a year, or 17.7 percent; work done each day, 2068 hours a year, or 77 percent of the total. The 2518 hours of daily and weekly tasks are divided as follows:

Weekly cleaning	3	hrs.	25	min.	per	wk.	186	hrs.	per	yr.
Weekly laundry	5	"	5	"	"	"	264	"	"	"
Daily cleaning	1	"	10	"	"	day	426	"	"	"
Daily cooking	2	"	5	"	"	"	760	"	"	"
Daily baking (averaged to per day)	1	"	0	"	"	"	365	"	"	"
Dishes (supper and breakfast)	0	"	30	"	"	"	426	"	"	"
Dishes (dinner)	0	"	40	"	"	"				
Furnace and water pressure tank (average)	0	"	15	"	"	"	91	"	"	"
Yearly total hours							2,518			

[1] Leeds, J. B *The Household Budget,* Philadelphia, 1917, 67 ff.

[2] Rowe, Mary. "The Time Necessary to do Work in a Seven-Room House for a Family of Three." *Journal of Home Economics,* 1917, pp. 569-573.

For a family of five.—Another household time record shows by the schedule of household, nursery and personal duties, how the care of young children complicates the working housewife's tasks. With a family of two children and three adults, the housemother's personal household tasks took 5 hours a day, her nursery duties 5 hours a day, and her personal time allowance (for meals, dressing, resting) 3 hours a day. Summarizing the work done by herself and the 21 hours a week done by hired service, there was an average of 15¾ hours of work a day divided as follows: regular daily tasks, 10¾ hours a day; extra weekly tasks, 35 hours a week or an average of 5 hours a day. The daily tasks divide into: housework, 3¾ hours; cooking, 2 hours; children, 5 hours—total 10¾ hours. The weekly work includes:—washing, 9 hours; cleaning, 12 hours; extra cooking, 1½ hours; miscellaneous afternoon work, 8½ hours; outside work, 4 hours—total 35 hours, or an average of 5 hours a day.[1]

Time for dishwashing.—A comparative study of the time required for washing dishes either three times a day, after each meal, or once a day found that the former took an average of 52 minutes a day and the latter 41 3/7 minutes a day, a saving of 20 percent.[2]

Time required for food work.—A laboratory problem of preparing meals for a family of six women, the work being

TIME FOR FOOD WORK.

	TIME FOR SEVEN DAYS	TIME PER DAY
Setting the table	3 hrs. 19 min.	28 min.
Preparing and serving food	18 hrs. 32 min.	2 hrs. 39 min.
Eating meals	11 hrs. 5 min.	1 hr. 35 min.
Washing dishes	11 hrs. 2 min.	1 hr. 34 min.
Total time for seven days (including time for eating)	43 hrs. 58 min.	
Total time for seven days (omitting time for eating)	32 hrs. 53 min.	

[1] Woodbury, Marion. "Time Required for Housework in a Family of Five with Small Children." *Journal of Home Economics*, 1918, p. 226.

[2] Carruth, Ella Kaiser. *Journal of Home Economics*, 1915, pp. 37-38

AVERAGE TIME PER DAY.

	BREAKFAST	LUNCHEON	DINNER	TOTAL PER DAY
	Hrs. Min.	*Hrs. Min.*	*Hrs. Min.*	*Hrs. Min.*
Food preparation	28.	1 2.	1 9.	2 39.
Setting table	8.	9.5	10.5	28.
Serving and eating	31.	29.5	34.	1 34.5
Washing dishes	30.	28.	36.7	1 34.7
Total	1 37.	2 9.	2 30.	6 16.2
Average daily time (time for eating included)				6 17.
Average total daily time for work only (time for eating omitted)				4 43.

done by a college woman student, showed the time allowances for seven days (after a trial week had first elapsed) as given in the table on the preceding page and above.[1]

This time allowance of 33 hours a week or about four and three quarter hours a day for the work connected with food preparation (exclusive of time at table) gives one fact measure of the largest single task in housekeeping. Food preparation required two hours and thirty-nine minutes a day; setting table, twenty-eight minutes a day; serving and eating, one hour thirty-four minutes a day; and washing dishes, one hour thirty-four minutes a day.[2]

Working day in farm homes.—The Department of Agriculture survey of "The Farm Woman's Problems"[3] showed (1920) that the average working day for over 9000 farm

[1] Van Arsdale, May B., and Monroe, Day. "How Is the Housewife Spending Her Time?" *Teachers College Record*, 17 (1916), pp. 417-429.

[2] The scale of living in the experiment is indicated by the following sample menu served: Breakfast: Stewed prunes, farina, cream, bacon, muffins, coffee. Luncheon: Cheese fondue, rolls, fresh pineapple, hermits, iced tea. Dinner: Veal cutlets, brown sauce, buttered carrots, baked potatoes, lettuce, French dressing, lemon jelly, cake, coffee.

[3] Ward, Florence. *The Farm Woman's Problems.* U. S. Department of Agriculture. Other descriptive data will be found in Office of Secretary of Agriculture, Circulars Nos. 103, 104, 105, 106; also Year Book, Department of Agriculture, 1914.

women in the northern and western states was 13.1 hours in summer and 10.5 hours in winter, with an average of 1.6 rest hours in summer and 2.4 hours in winter. Vacations were reported by only 13 percent of the women, with an average length of 11.5 days.

Miss Bailey's survey [1] of a limited number of farm homes (1914) showed the work day to be from 9¾ to 13 hours per day throughout the year, Sundays included. Later, in a Michigan county,[2] Miss Bailey and Miss Snyder found the average work-day was just over 13 hours in summer and 10 hours in winter, with a year-round average of 11½ hours (excluding time for leisure and personal affairs); in these homes, on the average, housework required 8 hours, 30 minutes a day; and in addition, the housewife gave: to dairy work, 49 minutes; to garden, 21 minutes; poultry, 43 minutes, and laundry, 62 minutes, beyond the time required for housework.

These three measures of the length of the work-day in the farm home, namely, 10.5 and 13 hours in the Department of Agriculture survey, 9¾ to 13 hours in Miss Bailey's first survey, and 10 and 13 hours in Miss Bailey's and Miss Snyder's survey, mutually substantiate each other.

Other facts shown by the Department of Agriculture survey were the following:[3] The farm woman has an average of 7.8 rooms to care for; the houses are heated by one or two stoves and 54 percent of the women make and tend fires; in 79 percent of the homes, kerosene lamps must be cared for; 61 percent of the women reporting have to carry water, the average distance being 39 feet; 96 percent do their own washing; 92 percent do their own sewing, the daily mending taking an average of 0.6 hours; and, finally, 94 percent bake bread.

In addition to housework, 36 percent of the women help with

[1] Bailey, Ilena. "A Study of Management of the Farm Home." *Journal of Home Economics,* 1915, p. 348.

[2] Bailey and Snyder. "Survey of Homes of St. Joseph County, Michigan." *Ibid.,* 1921, p. 352.

[3] The percentages are in all cases based on the numbers of housewives answering the different respective questions; the numbers answering varied in the different cases.

milking, 25 percent help with stock, 24 percent help in the field for an average of 6.7 weeks a year, 56 percent take most of the care of the garden, 81 percent care for the chickens with an average flock of 90. The average dairy herd is 6.8 head, and 60 percent of the women make butter. Thirty-two percent of the women keep the farm accounts, and 30 percent keep household accounts.

Hired help is not common in the farm home; the percent having help the year round is negligible, and 14 percent have hired help during the peak of heavy summer work, for an average period of 3.6 months; 8 to 10 percent have daily help for an average of 1¼ days a week.

The study of "Cost of Living on Minnesota Farms" [1] found on groups of farms in three different sections the average hours of household man-labor (that is, work for the house done by the man) to be as follows: 55.7, 70, and 82.7 hours per annum respectively; hours of horse labor similarly contributed to work for the house: 43.8, 74.6 and 81 hours respectively; no record was kept of the number of hours of unpaid work by the woman of the family. By putting a value on the home woman's housework at the cost of hiring equivalent housework, and on the man's work, the horse's time, and on hired housework performed, it was found that the home woman contributed an average of 84.2 percent of the value of work done for the home; the man, 3.9 percent; the horse-time was 2.4 percent; and hired house work was 9.5 percent.

Organizing housework.—Housework, whether performed by housewife or household employee, presents an important problem of organization. A task of unvaried repetitions of the same combinations makes no mental demand except in the first steps of learning. But a task, whose elements are simple, may still be a most complex undertaking because of its shifting complexity—its facts are now combined in one way, now in another. Such is housework. Its constantly changing elements can be ruled only through organization, i.e., by

[1] Peck, F. W. University of Minnesota Bulletin of College of Agriculture.

evaluating and subordinating tasks, by making schedules of work and lists of tasks and of materials, by assigning duties to individuals and measuring results in terms of standards. Even where the device of written work plans is not present, organized housework presents the fact of orderly working plans kept in mind. This is one of the factors of business management in the home.

How can housework be reduced in amount?—The facts show that the average housewife in the normal family has a longer work-day than that of most other callings, and it is a fair question for most homes, how can the amount of housework be reduced or better controlled?

Simpler housekeeping standards should be the first step in many homes where over-elaborate table service, household furnishings that make for extra work, wardrobe standards that involve needless tasks in the laundry, and similar over-refined ways of living have created unnecessary burdens. It is a nice question, how far to refine and complicate our standards of living. Certainly there can be no justification for that part of a thirteen-hour work-day which bases itself on the frills of existence.

The systematic cooperation of all members of the household in the tasks of the home, if put into effect, would give some needed relief. This cooperation will show itself, first, by such adjustments of habit as avoidance of the creation of unnecessary tasks: for example, the throwing down of newspapers and magazines after use, instead of returning them to their place. It will show itself actively in the taking on of that care of one's personal property, clothing, athletic goods and personal belongings of all kinds, which the owner should rightly put back in their appropriate place, rather than leave to the housewife's care. The single item of hanging up one's wardrobe or of arranging one's laundry package and later returning fresh linen to its place is a responsibility which may be taken over by the man of the house, thus affording a small time-saving that nevertheless has real significance since tasks added to the mar-

gin of a long day are like the proverbial inch on the end of one's nose.

The transfer of certain housework to outside industry may be the remedial measure needed. The laundry work or baking of bread may often be handled in this way.

A better material equipment for housework, that is, the investment of capital so that tools and machines of all kinds will supplement the housewife's mind and muscle, is an obvious way of reducing her tasks.

Cooperation between neighboring households in ways that reduce work is not to be despised, as in the purchasing and common use of expensive equipment, in marketing, child care, etc. Like all cooperation, it is liable to friction from human causes. It should be undertaken only upon a preceding agreement as to time-schedules, labor and repair costs, and other contingent expenses.

The possibility of reducing housework through services secured from the landlord, should be considered for the renter. There is a constant tendency in cities for the rental contract to include new services; heating, lighting, part at least of the cleaning, laundry facilities, telephone, maid service, etc., may thus be secured.

Hired service may be brought into the household, where money income permits and such service is available. The housewife of small means should consider part-time service, which might take over some especially heavy tasks.

The housewife who is overburdened needs to study her situation as to the relative importance of different tasks upon which she is engaged, eliminating here and there where she can by changing her standards, and then with the work that is left in the house find the best possible control of it, by equiping her household better, by sending out work, by securing the cooperation of other members of the household, or possibly by cooperating with other households, or by bringing in hired help. She must use whatever method will succeed best in reducing her tasks to a reasonable day's work.

Housework, the productive process, and homemaking, the consumptive process, between them occupy all the time of the housewife that there is; an increase in housekeeping hours reduces the time available for consumption, and vice-versa. As reduction of housework is accomplished by the introduction of machine equipment or other labor-saving methods, it is desirable that there result a broader culture for the family group, by developing the consumption side of the situation. There is, however, the danger of over-refining the housework which remains and so turning the possible margin of time back into unnecessary production, as by embroidering clothing, or, by increasing beyond a reasonable standard household furnishings which make work.

Our progressive standards of what is necessary and of what is "nice" are constantly adding work to the housewife's task, as in the case of health and sanitary requirements or of more complicated social life; so, as there is a reduction of housework through economic progress, there is a constant increase of it through social progress. A new type of housekeeping, which emphasizes the personal factors in the home situation, that is, the homemaking activities, seems to be developing, the demands of which on the housewife's time increase as the usual housework demands decrease. One needs of course to check new social requirements to be sure that they are essential needs, which advance some real purpose of the family, and not pseudo-essentials, and spurious suggestions of no permanent value.

The possible reduction of the usual housework suggests certain pertinent inquiries: will it bring about an undigested leisure for women good neither for them, their families, nor the community, individual examples of which are not far to seek? Since the reduction is possible only by a larger monetary outlay to buy in the market those products which the housewife used to create in the home, the reduction of housework will bring in a new higher cost of living problem, one really due to a cost of higher living. Finally, with costs

for the family gone up, the housewife may be led to undertake an outside occupation in order to maintain the home, and the home will suffer a kind of domestic suicide when the housewife becomes also a regular earner—caused by the economic cost of maintaining a home in which the housewife does not work productively.

Relative measurement of gainful employment within the household.—Granted that the housewife is to remain in the home and not to go out to wage-earning employment, how shall she choose between different possible gainful employments within the household? Shall she bake bread and cake, or do sewing, or do laundry? Or if she can eliminate one, which shall she eliminate? The choice is likely to be made on grounds of preference—to get rid of the most disagreeable task first and that may be sound economic policy. But it would be possible to make a comparison of the relative costs involved, and follow the line of greatest financial advantage. It requires for each decision a comparison of the cost of a market product and a home-made product—the former measured in terms of price, the latter in much more obscure ways.

The elements of housework have different relative values—some, such as the control of personal life, and the nurture of the child, are essential to family survival—a family without them would not be a family; some such as laundry work are non-essential to the home, and may be removed from the household without influencing its fundamental character. The value of any element of housework can be judged objectively by its essential relation to any one of the fundamental purposes of the household—economic, social or racial.

The cost of a home-product includes: Materials of all kinds used in its manufacture—including for dress, thread, trimmings, materials on hand as well as fabrics bought particularly for the garment to be made; or in the case of cooking, obviously fuel used must be counted in as well as food materials. Costs that enter into home-made products and that are commonly overlooked, include:—The rental value of the house

space used in the particular operation; the heating, lighting, cleaning, of the area; the cost of equipment used measured by a six percent interest charge on its value, and the depreciation, repair, and upkeep costs of the particular machine or utensil or tool; finally the labor cost is to be counted in—easily computed if it is hired, but a very fugitive item if contributed by the housewife herself.

Practically, after reviewing all other costs in home production, the housewife is the best judge as to which operation she can most wisely undertake, measured in terms of her own preferences, her experience of fatigue, her estimate of the educational significance of the operation to the child in the home, and her comparison of the home product versus the market product of this particular type as best meeting the needs of her family. Rent costs for space used, heat. light, interest and other indirect costs can be left out of calculation, with regard to any single product of a given situation, since these latent indirect costs add practically nothing to a particular financial outlay. But in appraising proposed readjustments, as in building a laundry room, buying equipment, etc., it is just these indirect costs that should be unraveled in advance and taken into account. In the long run, these indirect costs are to be counted; in the immediate case, they may be negligible.

The housewife's work presents a case of joint activity: (1) social and economic services such as home management which must be continued if our present type of home is to continue; and (2) additional economic activities such as cooking, sewing, laundering, etc., which fill in the rest of her time; and which latter, where money income permits, might be secured in whole or part outside the house. With the housewife held at home by necessary activities of the first kind she will normally continue activities of the second kind. Just which of the latter activities will be chosen will be a matter of relative economic advantage if she chooses wisely, as well as of personal preference and usage. It does pay to do one's

housework, and those who do it well increase their living thereby.

Economy in labor.—Human energy in housework is to be conserved as far as possible. This, in part, is a problem of studying the actual household tasks in detail, breaking them up into their component parts, and reorganizing them in terms of motion study as has been done in the case of factory processes. There will be lost motion in any task which has not been studied critically with a view to reducing it to its simplest terms. People will wash dishes "cross-handed," changing dishes from hand to hand unnecessarily without realizing the fact that the most expeditious route is from stacked dishes on the left hand through the dish pan to the stack of washed dishes on the right. So, as Charles Barnard pointed out in one of his early household experiment studies, in a kitchen one may have the bread board at one point, the bread knife at another, and the bread itself at still another, and take unnecessary steps in assembling the units in the process of cutting bread, and repeat the process day after day, without realizing that they may be assembled permanently at the point where the task is to be performed. So in setting a table a worker may be following a routine which involves awkward motions, unnecessary repetitions of the same work unit, and, in short, a constant loss of time and energy throughout the process. Mrs. Frederick [1] was one of the first to attack this problem.

Whether or not one follow the detailed suggestions of the household engineer and apply the principles of shop efficiency to household tasks, it is obvious that economy of labor by a critical study of its constituent motion elements is one fundamental way to progress. An example of economy in household labor is afforded by the students in a practice house who found that the day's work of the student cook who prepared three relatively simple meals a day for five people involved 8000 steps or two and one-half miles of walking. By wearing a

[1] Frederick, Christine. *The New Housekeeping.* Doubleday, Page & Co.. Household Engineering, American School of Home Economics, Chicago.

pedometer the girls soon learned to save steps, and the average became one-fourth mile for breakfast, one-fourth mile for lunch and three-fourths mile for dinner.[1]

By studying the work of maids while caring for dormitory rooms, an investigator discovered such facts as these: in cleaning a room, one worker made four journeys of 23 steps each way to the sink room when one trip would have been sufficient; the average times of different workers who were making a bed and cleaning a stationery bowl varied from 4 to 7 minutes; the average time for changing towel and emptying waste-basket was 35 seconds per room for an orderly worker and 57 seconds for one who worked in irregular procedure; dusting dresser tops when a tray was used to put objects upon, took 14 to 42 per cent less time than when objects were carried back and forth singly; average times for the best work based on 140 studies were—14½ minutes for cleaning a room; 3½ minutes for dresser top; 4 9/10 minutes for care of table and book shelf; turning mattress, putting on clean sheet and making bed, 4⅔ minutes.

Schedules in housework.—Schedules in housework give control of time. Even a skeleton outline as the following is useful as a guide for one's self or for employees: Monday—(1) Put house in order, (2) Cook for Tuesday, (3) Prepare for laundering. Tuesday—Do washing. Wednesday—Iron and bake; do thick starching. Thursday—Finish ironing. Friday—Put house in order. Saturday—Bake and plan for Sunday.

Specialized scheduling of work to be done, not a daily schedule merely, but minute directions as to each process and its constituent steps, is one of the progressive methods in industrial work. Such schedules or working plans it has been urged would be useful in every house, whether the work is done by hired employees or by the housewife, to reduce the necessary motions involved in each piece of work and to state in detail the successive steps in caring for bed rooms, or living

[1] Burfield, Gail. *Journal of Home Economics*, 1921, pp. 575-576.

rooms, in preparing the table for dinner, in cooking processes, in washing dishes, etc. It seems absurd to say that any one does not know how to wash dishes—any one can after a fashion; but the performance of the work without false motions, with every unnecessary step saved, with the various parts of the work joined together in proper sequence, would be as nice a problem as your shop manager would ask to solve. He attacks a problem, stop watch in hand, measures the time required for various part processes involved, and then sits down to the problem of eliminating useless motions, of arranging all accessory materials and equipment in the most convenient place and order. Once standardized and learned time will be saved and the process will always be shortened; and five minutes saved on each dish washing is an hour and a half saved each week—which means new freedom to the woman who does her own work.

Time economy can be secured partly by planning work ahead. The food-marketing program with monthly and weekly orders, and systematized cooking that periodically stocks up cooked staple foods, illustrate this point.

Time will be conserved by grading possible tasks as to their importance and assigning time to them in proportion to their importance, and then relentlessly eliminating tasks that can be given up.

Time itself is to be valued relative to the hour of the day, the condition of the worker and other circumstances. The first hours of the day are in general the best, though many home women find evening hours especially suitable for certain tasks that require the free and clear mind. It is well to stand out against the encroachment of work into rest periods whether in the afternoon or evening.

Written list of tasks, with time allotments, can be applied not alone to the housewife's and employee's tasks, but to those of the children and the man of the home. The mother who quietly placed a note on her son's door with suggestions regarding the care of his room and his clothing, "Signed, Committee,"

helped a growing boy to play his part in the household. Such time schedules, like the financial budget, must be worked out for the individual situation and must be made a helper, not a tyrant. Standard books on housewifery [1] give the basis for such directions. Mrs. Beecher's and Mrs. Wadham's compilations of rules for the employees of a large family household and Mrs. Annie Dewey's *Directions for Waitresses* and other workers of the Lake Placid Club have given suggestions to many housekeepers.[2]

The organized day—its satisfactions.—Two housewives spoke recently at a club meeting who had found a new "psychic income" of real satisfaction by organizing the ordinary processes of housework. Each woman was the mother of four children, but in one case the income was $20,000 a year and in the other $2000. The one woman did all her housework, the other had it done by a retinue of servants. The woman who did all her own work had introduced a system of cooperation whereby each child from the smallest who helped to get breakfast, had definite tasks about the house, the husband also cooperating so that the entire undertaking was carried smoothly and without any particular burden. The second woman who had a larger establishment with several servants had brought order into her situation by scheduling the various tasks and setting a limit of 8 hours to the work day, she herself serving as manager. It was evident that the satisfaction secured was about the same in either case since there was a sense of control and of achievement, and it was not primarily a matter of income that determined the satisfaction experienced.

The eight-hour day.—There is occasionally voiced the hope that housework may be reduced to an eight-hour basis. The eight-hour day for the household employee is not an im-

[1] Balderston, L. R. *Housewifery*. Frederick, C. *Household Engineering*.

[2] Beecher, Eunice. *The Law of a Household*. Hartford.

Wadhams, C. R. *Simple Directions for the Butler, Cook, Waitress, Laundress, Chambermaid, Child's Nurse* (separate volumes). Longmans, Green, New York.

Chambermaids' Directions, Waitress' Directions, et al., Lake Placid Club, Lake Placid, New York.

possibility; indeed, a definite work-day of ten, or eleven, or other definite number of hours has already been established in several countries by law, and has been proposed in one or two of our states. The eight-hour day for the housewife is another matter. It will come, if at all, through general industrial changes, as well as changes within the household itself. The process of transferring work from the home to the shop may have this outcome, that there will be left within the household only enough work to make a reasonable eight-hour program. Whether such a transfer takes place turns in part upon the development of industries competent to serve the household satisfactorily. The improvement in baker's bread, for example, gives hope that other industries rendering intimate service to the home, such as the laundry and cleaning companies, may establish standards of service and cost that will meet the family's needs more adequately than at present. Cost is always a relative term, depending in part upon the money income available to purchase the desired commodities. If the money of the wage-earner increases relatively to market prices, whether due to increased efficiency of the worker through training, or to a larger industrial capital, or to improved methods that increase production relative to the number of workers, the household will be in a position to benefit directly. With a larger money income, the family can buy more products and hire more services, and thus the housewife will find relief.

It is fair to ask whether the industrial gains of the working man should be used at present to reduce his working day below an eight-hour limit, and whether the housewife has not a fairer claim to the possible benefit which she might receive were he to work a longer day, earn more money, and make it available for reducing her workday to the same standard as his, namely, eight hours. Women workers in the home have been the beneficiaries of industrial progress through the invention of household machinery brought into the home to assist in tasks there, also in the transfer of work from the house to the shop. They have also benefited from the increase in money income and

real income of working people. One of the direct benefits to the working man, however, and it is a benefit which no one would wish to take away from him, has been the reduction of his working hours successively from fourteen to twelve, to ten, and in many occupations to eight hours a day. The housewife's day has also been shortened, but the facts indicate that in the typical family group, whether on the farm or in urban life, the housewife who is meeting her responsibilities of doing the housework, caring for the children, and making a home, is working ten hours or more a day. She has as good a right to an eight-hour day as has the working man, and it should be one of the first goals of domestic progress to secure standard working hours for the housewife.

But is not the eight-hour day for the housewife a quixotic fancy? It certainly is, if we mean by the eight-hour day in the home that the work is to begin when the whistle blows at eight in the morning, and stop at the same signal at five, with an hour off for lunch. We all know that household tasks are not all of them at least reducible to a time-clock system. Wherever there are children, responsibilities are on a twenty-four hour schedule. It is possible, however, to so reduce the tasks of home-life that they can be accomplished by the working housewife within an average of eight hours a day, although the working hours may come in a broken sequence, and that is all that we can mean by an eight-hour day in the home. How this will work out practically has fortunately been already demonstrated by the eight-hour day schedule which progressive housewives have drawn up for employees. The work in such a case may start at six in the morning and end at ten, and begin again at four and continue until eight. A housewife's eight-hour day may run from six-thirty to ten-thirty, eleven to twelve, one to two, four to six; or in any other combination of hours which best meets the needs of her situation. Such a schedule would mean that while the work is on one devotes one's best powers to it, but when free hours come tasks are laid aside. Even on such a program, no housemother with

children would have her free time to herself. Her responsibility in this regard reaches twice around the clock. The best that can be done probably is to stand for a reduction of working tasks to such an amount as will not exceed an eight-hour day, expecting that the personal responsibilities of the home will go on in other hours.

The question may well be raised whether a housewife has the same need of a limited workday as other workers; [1] since there are special motives in her tasks that make them easy, she is her own employer and can turn at will from work to recreation, she controls her own work and rest periods, is not wearied by a long walk to and from work, is rested by change and variety in the tasks, and does not feel the pressure of output. On the other hand, there are factors that relatively increase fatigue in housework: the longer work-day in housework than in many outside employments; the heavier tasks such as scrubbing, washing, hanging up clothes, ironing, lifting children, care of furnace, etc.; the constant supervision of one's children, while one is also performing other work; the fatigue of working for and with different personalities intimately; the poor lighting and poor ventilation in congested city dwellings giving working conditions which no industrial engineer would tolerate in planning an industrial plant.

The housewife must secure good light and air in her working situation and use brief rest periods when fatigued, as well as reduce fatigue as far as possible by adequate equipment, by improved working methods and by family cooperation. On the whole, the housewife's claim to a limited work-day is as well-founded as is the man's.

This housework problem has important implications—overwork affects the health of the mother, and if it does not affect the physical inheritance of the child it certainly interferes with adequate attention to its nurture; with the house-mother dragged out, there can be no leisure activities for her or for

[1] See discussion in Abel, M. H. *Successful Family Life on a Moderate Income.* Chapter 9.

the family group under her leadership; the standards of living for all members are depressed below the level that might otherwise be realized. There have been moving pleas against long hours in the shop that give the workingman no chance for life and leisure; the same plea with equal justice can be made for the housewife. The man needs leisure for greater productivity; the housewife on precisely similar grounds, so that her whole family may have a more abundant life.

Household waste.—The operation of the household gives rise to various kinds of waste and their reduction and the economic utilization of waste products is an important operating problem.

The chief household waste materials are food waste, clothing and rags, paper boxes, barrels and other wooden waste, tin-cans, waste metals, old rubber, glass, coal ashes and occasional discarded furniture and household furnishings. All waste having an economic value should be utilized by the family concerned, either by direct use by some one of its members or by sale to a dealer, or by gift to a charity such as the Salvation Army's industrial department, which specializes in such material; the final resort is, of course, to turn material over to the community garbage collection system, and this system should be so handled as to extract whatever values the waste may still have.

Food waste includes the inedible materials, as bones, peelings, etc., and also rejected edible waste resulting from careless preparation, from over-generous table service and from left-overs which were not utilized.

The percentage of food refuse or inedible waste varies by weight for meats from 1 percent in lean flank to 54 percent in a hind shank; in eggs, it is 11 percent; in fish, it averages 55 percent; in fruit, from 5 to 60 percent, and in vegetables, from 7 percent for string beans to 61 percent in green corn. In edible food waste, fats are to be particularly noted since they are usually wastefully handled—25 percent of edible fat being lost, Pearl estimates. It also includes portions of edible food

that might possibly have been used although practically their conservation was impossible. The use of fat for homemade soap is a common household utilization of a food waste.

Food waste can be conserved on the farm through feeding to stock or poultry; in the suburbs to some extent by burying as fertilizer, provided lime is put with it to prevent souring the soil. The same ground can be used again after two years. When collected in cities food waste may be dumped or buried or it finds utilization in the recovery of fats for industrial purposes, the making of fertilizer, and sometimes in feeding hogs.

Articles of clothing, no longer of use to one family, can usually be passed on so as to give service elsewhere, either privately or through a church or charitable organization or through the second-hand clothing trade. There is a social responsibility for such further utilization of clothing and every reason why the economic values represented by the partly worn garments should be recovered for the original owners if possible, or at least that they be utilized socially. There are in several cities clothing bureaus that solicit gifts of worn clothing and sell them at reasonable values, the proceeds going to charities, such as the Clothing Bureau and Everybody's Thrift Shop of New York, and such enterprises could be copied elsewhere. The rummage sales held by churches and other organizations are usually a temporary expedient of the same sort; but in some localities so systematized as to serve the purpose of a Clothing Bureau. There is an odd feeling against selling second-hand clothing to the trade—we gladly give it away to some one in need or to an organization but there is a taboo against selling it which has the force of a folk-way.

Some discarded clothing finds its way directly into the hands of junk-men at little or no cost and by them it is diverted, if still possessing wearing quality, to the second-hand clothing store, or if not, to the rag trade. A hopeful fact in the situation is the practical instruction in making-over clothing given under home economics auspices; "Remaking hats," "Made-over children's clothing" were features of war-

economy teaching that tend to remain in the school program. Woolen rags and waste, it is particularly important to salvage, since "wool never wears out," and reworked wool or "shoddy" must be depended upon each year in woolen manufacture.

Rags and old papers may of course find wide use in the household for cleaning and the like, although careless housekeepers bundle them off upon the garbage collector. Rags can be made up into attractive floor rugs, or they will usually bring a price from the itinerant junk-man who will also gladly take bundles of papers and will sometimes pay for them. An occasional family secures a few dollars a year income from waste paper and rags—one Weehawken family reports $3 a year for paper, and a Chicago apartment house $2.50 a week. Old magazines and books should go where they will be used, to hospitals or other institutions.

Wooden boxes, barrels and shipping cases, cardboard boxes and cartons, and bottles ought to get back into the trade for industrial use, but too often go to the city dump. There are, for example, second-hand dealers in barrels and in bottles who salvage them. Wooden material is useful as household fuel and where conditions permit, might at least be saved for kindling and for the children's Fourth of July celebration. A Ford car carrying a bundle of wood on the running board, evidently parts of old boxes destined to serve as fuel at a day's picnic fire, showed how the household's waste material may be conserved and refined to a transcendental use!

Coal ashes, unless the furnace is managed with unusual skill, will often carry 20 percent of the original fuel value still unconsumed. This fact justifies sifting where labor is cheap enough. Ashes can be used for fills and in a limited amount to mix with clay garden soils. When collected, ashes are usually dumped, although the fuel value gives them a use in the municipal garbage incinerator.

Metal wastes are usually not recoverable by the household by direct use, although the householder who works with tools will find a metal scrap heap worth maintaining if there is

space for it. Copper, and lead, and sometimes iron can be disposed of to the junk-man for cash; but tin-cans are a *bête noire* to householder and garbage collector alike, and find their best destiny in a fill where they will be speedily covered up. An interesting handicraft utilization of the ubiquitous tin-can has appeared in the making of toys.[1]

Rubber is usually saleable for cash to the junk-man, and at ordinary times, the man who sells you a new auto tire will allow for the old shoe or worn-out inners as junk. Glass bottles often can be marketed to the junk-man. Cast-off furniture and furnishings are sometimes too far gone for further service but usually they can find an economic outlet through the second-hand dealer or through a charitable organization. The old-fashioned attic that conserved old furniture was often a treasure house later on.

Every industrial undertaking watches its wastes and utilizes them so as to add to its income. The household should do the same, and secure, where possible, a return in money; or where materials are transferred to a charity that can realize upon them, a return in service rendered can at least be entered upon the records of one's conscience. Where the community handles waste the housewife should be keen to see that the service is made as efficient and as nearly self-supporting as possible. It may even sometimes produce a revenue in some divisions of collection, as food waste or wood, paper and other junk collection.

In some modern city houses an incinerator for all waste is being put in; the economy of a method requiring gas fuel needs to be proved in each case; where the heat is partly used for water-heating, that is desirable.

There is an educational value in letting children of the household care for waste materials and have as an allowance what they realize upon them. There is danger here for an occasional boy, as a recent study of junk-dealing and juvenile delinquency comes to the conclusion that "dealers repeatedly

[1] Thatcher, Edward. *Making Tin Can Toys.* Lippincott, 1919.

violate state laws and city ordinances in their relations with children. Junk-men not only readily accept the fruits of the boys' illegal acts but frequently urge them to steal." [1]

Household storage.—Operation involves the problem of storage of supplies, working equipment, and furnishings. The storage function of the household involves the care of objects: (1) of daily use, (2) of occasional but not constant use, (3) of seasonal use, and (4) of objects more or less permanently in disuse which it seems wise, however, to hold against future possible use because of some intrinsic worth. The economic service of storage is of course the creation of a specific time utility in the object stored—holding it from a moment when it has no immediate utility until a time when its use is immediately of service in the family.

The objects to be stored include: materials such as fuel, food, clothing, cleaning supplies, held in reserve until needed; tools and machine equipment, as dishes and utensils, brooms and brushes, sweepers and laundry equipment, when not at the moment of use; linen for table, bed, and lavatory; the whole furniture and furnishings of the house; books and reading materials; stationery and writing materials; musical, athletic and other recreative and cultural goods; medicine and sickness supplies; check and account books, inventories and all other household records.

There is a variety and complexity here that makes the household storage problem much like that of caring for the books in a library; and what is needed is much the same provision: (1) a systematic classification of materials, with (2) an equipment of shelves, cupboards, drawers and other storage facilities all adjusted nicely to the materials to be stored; (3) convenient records of the location of objects stored, except for those so customarily used that knowledge of their location is a matter of mental habit; and then (4) the important habit on the part of all members of the home of replacing in their appropriate places all objects after being used.

[1] An investigation for the Juvenile Protective Association, of Chicago, 1919.

Efficient storage, preventing deterioration, is a considerable factor in securing full economic service and the saving of time and worry through convenient storage is also a large item of economy.

Cleaning the house—a typical operation problem.—One of the larger divisions of household operation comprises the work and expenditures involved in the cleaning processes, and their analysis affords a typical economic problem in this field. House-cleaning is the problem of disposing of foreign material, which has made its way into the house. The character of this material is determined partly by the street-soil which has been blown in, tracked in, or brought in on garments. The disintegration of materials within the house, particularly fabrics, and food preparation and service contribute other material to be disposed of. Volatile food materials, particularly decomposition products of fats, given off in the cooking process, adhere to ceiling and walls. Insect pests, flies, and, in the cities, household vermin of various kinds add to the problem. The germ life which is carried on dust particles complicates the situation with possible danger to health. The products of respiration require removal by ventilation if not by more vigorous cleansing measures. Even the occupants of the household disintegrate as it were and particles of epidermis, for example, add to household debris as is vividly realized in disinfection after contagious sickness. There is a constant deposit of foreign material throughout the house and this creates for us the problem of house-cleaning.

The amount of foreign material to be removed is very evidently determined by different conditions, some of which are subject to control. The construction of the house itself, if it be tight about doors and windows, will exclude a great deal of foreign material. The use of screens to exclude insects, dustless heating arrangements—for example, steam or hot-water, rather than stoves or the hot-air furnace, and the filtering of air through cloths, are some provisions which will reduce the amount of dust finding its way into the house. House

construction can also reduce the work of dust-removal as by avoidance of angles and unnecessary panelling and by the use of rounded corners and smooth surfaces wherever possible. Special provisions may also be made to control processes which create dust as by providing a special room for brushing clothing, blacking boots, etc. Someone has still to invent the dustless furnace, although oil heating affords a great reduction of dust over coal fuel. Conditions outside the house affect the amount of dirt finding its way in, and we are learning that municipal street-cleaning, ash-removal and the like, can be so conducted as to control dust. Ordinances forbidding the beating of rugs, and the shaking or throwing of dust from windows in congested city districts are also important. Smoke control will greatly reduce the amount of necessary house-cleaning. The habits of persons occupying the house affect the amount of foreign material to be removed. The use of rubbers in muddy weather, the door mat, habits of personal cleanliness, and the custom of picking up after oneself, necessary alike for children and adults, and the avoidance of dust-forming practices within the house are to be considered. The number and character of house-furnishings affect the dust-removal problem, if not the amount of material, as a superfluous amount of bric-a-brac proves.

Possible methods of disposal of foreign material may be classified as first, the traditional "feather-duster method" of displacing the dust or getting it out of sight; next, the inefficient "broom-method" of gathering together simply the larger particles of dust and having little regard for complete cleanliness; and finally, the modern methods of house-cleaning, which consists of three terms,—first, the exclusion of all possible dirt from without; second, the prevention of all possible dirt-creation within doors; and third, the entire removal of all dirt which succeeds in entering, in ways which permanently dispose of it. This third method uses, of course, such utensils as the vacuum cleaner, and oiled or dustless cleaning mop and cleaning cloth, as well as effective house construction, sensible house

furnishing, and cooperative habits on the part of all members of the family.

An important fact too often overlooked is that dust lying quietly on top of a bookcase or under a bed has no effect upon health, but when stirred up and left floating in the air it becomes a source of danger. Any sweeping or dusting operation which stirs up a part of the dust in the course of removing the remainder is to be regarded as detrimental to health. The great virtue of a good vacuum cleaner is that it removes the fine dust as well as the coarser particles. When a vacuum cleaner is not available it is very important that brooms, mops and dust cloths be always moistened or oiled before using, and then used by gently dragging over the surfaces to be dusted, and never whisked as this may stir up the finer part of the dust even though the broom itself is damp.

Standards of house-cleaning.—Having regard to different methods of domestic and municipal house-cleaning, one would find in any community four levels of house-cleanliness, which might be described somewhat as follows:

1. Entire disregard for house-cleanness manifested by indifference to dust on floors, furniture, walls, and windows, to tracked-in soil on floors and floor-coverings, a standard that has a cleanness efficiency approaching zero.

2. Primary esthetic cleanness, or cleanness for the sake of "looks;" windows washed because callers would see the dirt; weekly dusting of rooms and possibly furniture because "things look dusty;" annual house-cleaning for traditional reasons. This standard represents cleanness for the sake of appearance primarily, with a cleanness efficiency of perhaps 25 percent.

3. Hygienic cleanness based on the efforts of the housekeeper alone, without community cooperation. There is a regular schedule of cleaning at frequent intervals; the methods provide for dust removal, for dust exclusion and for personal habits that will minimize dust and dirt, but without the community's cooperation, such a standard in a congested neighborhood will scarcely reach more than 75 percent of efficiency.

4. Hygienic cleanness based on community and individual cooperation. With the individual doing all that is outlined above, and with the municipality doing its full part in reducing dust and dirt, in controlling smoke, in cleaning streets and removing ashes carefully, and in preventing the ignorant housekeeper from merely transferring her dirt into the home of her neighbor, a household may achieve a cleanness efficiency in terms of hygiene and esthetics of from 90-100 percent.

The housework problem is modified in unexpected ways by industrial progress. Thus gas, as a convenient fuel brings a direct benefit, but an indirect benefit also arises through reducing the community smoke nuisance and thus aiding in the cleaning problems of the home. In London there were 30 days of dense fog per year in the ten years prior to 1892, when gas fuel began to be widely introduced. In the next 10 years, fog days were reduced to an average of 20, and in the next 10 years there was a further reduction to 10 days.[1] It is interesting that one of the strong arguments for central heating and central hot water services, as well as the household use of gas, is the reduction of the smoke nuisance; and that it is being used effectually in England to-day and recently led to a central heating service in an Iowa city.

Cost of cleanness.—The cost of household cleanness involves all of the direct and indirect factors which can be given an economic interpretation. They can be analyzed, first, into the positive costs such as: (a) The permanent cleaning equipment used by the housewife, varying from a broom and mop equipment valued at a dollar or so, to special hand equipment of cleaning cloths, special brushes, etc., and up to the vacuum cleaning engine and pipe systems which may cost a thousand dollars or more for a single residence. (b) Current supplies used in cleaning involving soaps and other cleansing materials, water even, which must be included in any strict accounting of the cost. (c) Labor costs. (d) Changes in interior furnishings and equipment which may be made for the

[1] *The Gas Age.* Feb. 15, 1912, p. 180.

sake of cleanness; for example, if an open bookcase costs $20, and a dust-proof one $40, the difference of $20 may be counted as part of the cleaning expenditure. (e) The household's share of municipal expenditure for cleanness.

The analysis of cleanness costs must often take account of negative factors, that is, the losses in health, in effective living, due to lack of cleanness. We have begun to get some idea of the actual cost of ill-health and lowered vitality as well as of sickness, medical care, nursing, and death charges; and these economic losses are among the strongest arguments for better sanitary conditions and for more skilled housekeeping.[1]

Mrs. Richards has suggested that one-fourth the rental cost or say 5 percent of income is a minimum outlay for cleanliness necessary to keep the household above the disease level, and that one-half the rental must be paid to secure desirable standards of cleanliness when one takes into account low standards of personal and municipal hygiene.[2]

Household operation in the budget.—Mrs. Richards allowed 15 percent more or less for operating or housekeeping expenses in the moderate income family, and there is a tendency for this allowance to increase as income grows. With smaller incomes the allowance for fuel and light has been standardized at about 5 percent[3] and at least another 5 percent, even in minimum incomes, goes for items that belong with operation, that is, household and personal cleaning costs and upkeep of household equipment. Household wages, of course, do not appear in minimum budgets but do in comfort budgets and when service costs once appear they steadily increase and are responsible for indirect increases of costs elsewhere as well as for the wage bill itself. Household operation expenses may therefore be assumed to require about a tenth of small incomes, one-sixth of moderate incomes and from

[1] See Richards, Ellen H. *Cost of Cleanness.* Balderston, L. Ray. *Housewifery.*

[2] Richards, Ellen H. *Cost of Cleanness,* pp. 7-13.

[3] Varying from 6 percent on very small incomes to 4 percent or thereabouts at the comfort level.

that up, to one-fifth, or one-fourth, or more of very large incomes. Operating expenses are often the uncontrolled variable items of outgo, and hence respond to good management and efforts for economy. Bills for fuel, gas, telephone, water, electricity, supplies, carfare and the like grow with thoughtless spending and careless use. Here the housewife has the opportunity to apply her management ability in controlling costs. Upkeep costs for household furnishings are a case in point.

Upkeep costs.—Good management requires that all household property be kept intact and in serviceable condition by regular repairs and by renewal of articles as required. The maintenance charges for the house itself are part of shelter cost, but the maintenance of household furniture, furnishings, equipment, utensils, tools and the like, is part of operation expense. The initial purchase of any new item of furnishings is not upkeep but rather increase of capital, or betterment of plant. The equipment maintenance will vary in cost according to the standards set for renewals and repairs. It is possible to postpone renewals and repairs, but in this case one is using up one's capital. There are circumstances under which this is desirable as when one anticipates moving and so postpones replacements until a later period, or where one is withdrawing from housekeeping and wishes to use up, as far as possible, one's equipment and extract from it the values it possesses. Under ordinary circumstances, real economy lies in making repairs as soon as needed, and in making renewals as soon as an item of equipment becomes unserviceable, so as to keep one's household equipment at a stage of complete efficiency. The costs of upkeep can be determined only by experience in a given case, and statistics of such costs are available only in limited income families. Probably three to ten percent of the costs of equipment would need to be allowed, varying with different furnishings. Items that have low upkeep costs are illustrated by: good furniture, rugs, pictures, silver, books; items that have high upkeep costs are illustrated by cheap furniture, kitchen utensils, table china, table linen.

The United States Department of Labor showed in 1920 that the average expenditure for furniture and house furnishings in 6180 families living in 36 northern cities was $68.12 per year and for 1983 southern families was $74.59 a year; indicating that the average family was spending about six dollars a month or $72.00 a year for furniture and furnishings. The average expenditures at different income levels, varied from about $30 a year at incomes under $900 to about $120 at $2500 and over. Household equipment on 22 Minnesota farms was estimated to cost in depreciation and in interest on its value $41.17 per family or $8.17 per person per year.[1] In the "Quantity and Cost Budget" of the United States Department of Labor $60 a year is made the standard allowance for upkeep and this represents an annual cost of 6 percent on property worth $1000 or thereabouts.

[1] *Cost of living on Minnesota Farms.* Bul. of University of Minnesota.

CHAPTER XIII

HOUSEHOLD OPERATION—HOUSEHOLD EQUIPMENT AND COMMERCIAL SERVICE COMPANIES

This chapter discusses two important economic factors that concern housework or the operation of the household which has been considered in certain other aspects in the preceding chapter. There is here presented, first, the utilization of mechanical equipment within the household; and next, the household's use of outside service companies as illustrated particularly by laundry and heating companies. The succeeding chapter treats of hired labor within the household or the domestic service problem.

The home and the machine.—The whole modern period in which we live may be summed up in the relations of the home and the machine. The industrial revolution meant the transfer of industrial processes from the home to the factory, so far as the production of goods for an outside market was concerned. Some production for immediate consumption within the family did not, however, yield itself to machine methods but has remained within the home. Progress for the home today as far as housework is concerned is in part to be accomplished either by transfering housework outside the home to the machine, or by bringing the machine to the work left within the house. As a matter of fact, progress will be ultimately secured along both lines. All that part of housework which can be transferred outside the house without destroying the home as a center of the personal life of the family group,—and that we are seeing concerns the adults as much as the children,—is bound in time to be organized in large industrial

units. The laundry, for example, may better be done in a sanitary factory with specialized workers, provided it develops methods that will reduce the present mortality of garments sent to the commercial laundry. There is an irreducible minimum, however, of work which must stay within the home—the care of the house itself and its furnishings, the immediate preparation of food and the family table, the care of the child,—these things in the nature of the case cannot go outside the home, and the last word in progress is to bring the machine in to lighten work and substitute for hired help. There is a wider field of work, which as a practical matter will remain within the home, especially within the detached house at least, —the laundering of textiles in part, the care of clothing, the domestic food processes as we know them—all these seem likely to remain within the house for some time to come, partly for personal and historical reasons, but even more for economic reasons which make it imperative that the housewife add to family income by productive work at home. The wife is needed at home for its personal control; she must add her share to family income; she can do it only by retaining certain household arts within the home, although gradually other methods of income-producing may open to the married woman. For the present, however, for many household activities progress must come through the adoption of machinery within the home.

What the farther future has for the home, one may not know. But the growing emphasis upon its personal values may lead one to prophesy the ultimate transfer to factories of all housework save that concerned with the care of person and personal property, with the service of the family table—furnished increasingly it may be from outside kitchens, and with the care and direction of child life and the family group.

Now the person who will experiment with the problem of adapting machinery to the economical performance of work within the household is solving one-half of our puzzling housework situation. And the person who develops methods of

handling the work of the house transferred to outside industry is solving the other half. In either case, it is to domestic engineering, whether small or large, that we must look. It is just that which our colleges must give us, training for the household technician and engineer, a professional worker who will specialize in the field of household engineering with the same thoroughness, the same intensity, the same singleness of aim as mark the preparation of the marine engineer, the electrical engineer, the chemical engineer, or any of the other specialized engineering professions which have developed in the last two generations. Then we shall have leaders who will be able to domesticate the machine era—and thereby permit the further personalization of the home.[1]

Machinery within the household.—Less of the drudgery of hand labor is the first effect of machinery in the household. A higher standard of living results, as the energy released from hand labor is applied to secure other satisfactions desired such as a higher standard of cleanness, more cultural satisfactions. Better health conditions may be anticipated by reducing extreme fatigue. However, if the reduction of work is excessive, the problem of the housewife's undigested leisure time may result unless the personal and social standards of the family are elevated as economic pressure on the housewife is diminished.

Labor-saving equipment.—Under this head may be included all appliances for utilizing human labor more advantageously. It may, as a tool or a utensil, directly utilize human energy more advantageously; it may, as in the power machine, enable human energy to utilize and direct other power, electric, steam, or mechanical. Machines have already been utilized in nearly all household activities, but often with the attendant result of removing the work from the home, since machines are used most advantageously in larger groups in the factory system where power and the interrelation of ma-

[1] See also Lebovitz, J. "The Home and the Machine." *Journal of Home Economics*, 1911, 141.

chines and organization of workers can be applied. The machine is a powerful influence for removing work from the household and machines can be applied to an unknown extent to the work necessarily remaining in the household.

The invention of machines in general industry has depended upon the subdivision of tasks and specialization; household industry does not furnish the best basis for the specialization of machinery since the household tasks are performed by a single, solitary worker, so that there is not the opportunity to subdivide tasks minutely and allot their part to different individuals.

The further introduction of machinery into the household will require an overcoming of prejudice and ignorance in the present grade of hired help or the use of a higher grade of domestic worker, and increased knowledge on the part of the average working housewife. This personal factor which limits the introduction of machinery will doubtless be improved as more attention is given to household physics and mechanics in our school courses in household arts.

Habit and custom are often obstacles to machine equipment in the home, as is the housewife's traditional feeling that she does not understand machinery. The automobile, which women everywhere operate, has been an indirect stimulus to overcoming this traditional attitude, and household mechanical equipment has doubtless been thereby facilitated.

Certain characteristics of household work limit the introduction of machinery, particularly the small volume of work which limits the output of the machine. In a factory, a machine works eight or ten or even twenty-four hours a day, six or seven days in the week, and so the large capital required for specialized machine equipment pays for itself in continuous production. In the household a laundry machine may be used for only four hours a week and the loss due to its standing idle is an obstacle to its introduction. In other words, the limited utilization of an item of capital goods in the household is a natural limit upon the introduction of such goods. The cost

of a power plant in a detached farmhouse, which if used can be only partially utilized, is a similar impediment. Electric power in urban communities obviates this difficulty since the individual household draws on the power only as there is work to be done. Of course larger family incomes permit the ownership of expensive household machinery even if it be but partly utilized.

The non-competitive character of housework has limited the introduction of machinery, which has come about in outside business through the drive for profits and lower costs in order to hold markets.

There has been in the past a good deal of exploitation of the household by manufacturers of inferior machinery, which is forced upon the housekeeper by tradesmen and salesmen, and then proving its lack of worth has served as a check to the adoption of other, good machinery. One of the great services which household magazines have rendered in this field is the testing of equipment and the setting of standards.[1] As government housekeeping stations are developed as part of the state agricultural experiment stations, this service will doubtless be undertaken in part by them. There is needed, of course, not only a testing of machines now on the market but an active policy of studying the possibilities of applying machinery to the household, and in this regard government experiment stations could render a unique service.

How can the household determine whether a proposed machine will be an economy? This is a matter not alone of the original cost of the machine but quite as much of its maintenance costs, the probable length of service, the labor factors involved, the effect a machine process will have on the product, and the amount of use the machine will have. Adequate studies of the consumer's interests in this field are still to be made.

In securing a machine a household may buy outright or it

[1] Good Housekeeping Institute, New York, was a pioneer in this regard, and other testing bureaus have been established by the *New York Tribune* and *Modern Priscilla,* Boston, which are bringing to the housewife facts that make for intelligent choice.

may join cooperatively with neighboring households in such purchase as occasional experiments have shown to be practical, or it may hire machine service from commercial agencies if the machine service is needed only occasionally and if the investment in the machine is large and trained labor is necessary.

Efficient equipment saves human energy.—Calorimeter tests by the United States Bureau of Home Economics [1] show that washing dishes on a table so low that the worker must bend over required an energy output of 30 calories per hour and on a table too high for comfort required 25 calories per hour; while the output was only 21 calories per hour on a table of the right height—a saving respectively of 30 and 16 per cent.

Hand versus power machines.—Is a muscle-driven machine an economy where non-human power cannot be had? The sewing machine has of course made its way as the one piece of power equipment found at one time almost universally in homes, strictly on the basis of a muscle-driven machine. Its saving over hand sewing is obvious and where an electric motor is attached the saving is increased. But there are household processes where the hand-driven machine may not excel the original hand process—such is sometimes the case with the hand dish-washing machine. Mrs. Frederick has pointed out that the portable hand-driven dish-washer saves only in cutting down the actual washing time and that there are off-setting disadvantages—very hot water must be prepared and carried by hand to the dish-washer, and waste water carried away; the time saving "is partly offset by the increased amount of effort necessary to operate the lever in all cases." With plumbing attached to the washer, and a water heater able to give very hot water, the difficulties would be partly removed, although the item of excessive muscular exertion remains.

The power household machine in some cases is temporarily

[1] *Journal of Home Economics*, 1920, p. 506; *Ibid.*, Dec., 1922. For calorimeter studies of housework, see Benedict and Johnson, American Philosophical Society, 58 (1919), p. 89; and Langworthy and Barott, *American Journal of Physiology*, 1920, p. 400.

automatic so that the worker can give her attention to some other task. This is true of the washer, the centrifugal drier, and the dish-washer. A woman who had her clothes washer and dish-washer going simultaneously while she was doing five minutes of machine sewing in an adjoining room experienced some of the possibilities of mechanizing the household.

An equipment program.—Every family should have a program for more adequate equipment that will state the next most desirable additions to its own present working outfit. A partial list of items is suggested here which a farm or town housekeeper can check over against her own needs.

1. A good range—if possible with gas control or an insulated oven.
2. If a coal stove is used, fuel supply along-side of the stove, enough for a couple of days ahead; and the general supply at hand.
3. Kitchen sink and pipe to carry off waste water; and, a great convenience that can be installed at slight cost, the sink adjusted to right working height for worker to prevent strain.
4. A method of heating water in small and large amounts with the hot water piped to the sink.
5. Piped water supply to the kitchen at least. If there is no community supply, it can be had by gravity pipe if there is a water supply above the house level and then costs only the pipe; or, by hydraulic ram service from some point below the house if there is a slight fall in the water,—this costs a few dollars to install and nothing to maintain; or if necessary, by engine, electric or force pump and elevated house tank, or by air pressure tank system.
6. Indoor toilet and bath room, and a basin with hot and cold water for family use and another for use of hired help.
7. Cool storage—a cool box, for use except in the summer, built on the outer wall of the kitchen and opening by a door directly into the room; ice box storage, for summer, either in the kitchen or next to it; or, iceless evaporation closet.
8. Location of kitchen work units—range, sink, work table, storage of food and utensils, in proper sequence about the room to save cross paths in usual work.
9. Adequate food supply storage. A wide variety in sufficient quantity for several days' use conveniently placed in the

kitchen, with reserve storage of staples for a month at least where space permits.

10. Adequate supply of kitchen, serving and table utensils and dishes so as to permit stacking of soiled dishes and elimination of one or two dish-washings a day in emergency or as regular routine.

11. Kerosene or other quick fuel and cool cooking conditions for the summer—with outside kitchen and work room, shaded and screened.

12. Fireless cooker for the year round. The home-made fireless cooker insulated with crumpled paper has been shown to be more effective than many commercial types.

13. The steam pressure cooker which gives super-boiling temperatures is desirable not only for canning but also for "cooking of tough meats, many cereal preparations (not most batters and doughs), dried legumes and vegetables of mild flavor." [1]

14. Laundry equipment—power washer, wringer and ironer run by motor or engine; a self-heating iron, electric if possible. Or, patronage of a commercial or cooperative power laundry.

15. Sewing machine—with power if possible.

16. Equipment for canning and preserving food; for canning in tin as well as in glass.

17. A power-operated dish-washer if there are five or more in the family and if hot water supply can be arranged—then the day's dish-washing done at one time and with the man's assistance sometimes.

18. A furnace to reduce the care and dirt involved in separate stoves.

19. A lighting system that will remove work-making kerosene lamps.

20. Vacuum cleaner—if electric power can be had.

Equipment in homes, rural and urban.—Miss Ward's survey [2] showed that of the approximately nine thousand farm homes reporting, but 22 percent had power for household

[1] Denton, Minna C. "Use of Pressure Cooker in the Home," *Journal of Home Economics*, 1921, 361. Also Hood, Grace Gordon. *Journal of Home Economics*, 1915, 375.

[2] Ward, Florence. *The Farm Woman's Problems.* U. S. Agricultural Department.

equipment, while 48 percent of the farms had power for farm machinery. There was a wide variation with regard to household power, 12 percent of the farms in Eastern states having power compared with 22 percent in Western states and 29 percent in Central states; in one state, only 2 percent of the homes reported household power, and in the maximum case 56 percent so reported.

Of the farm homes reporting, 32 percent have running water; 65 percent have some kind of water supply in the kitchen; 60 percent have a sink with drain; 20 percent answering have a bath tub, but 90 percent have an outdoor toilet.

A washing machine is found in 57 percent of these farm homes; a carpet sweeper in 47 percent; and a sewing machine in 95 percent. The fly nuisance is controlled by screened doors and windows in 96 percent of the homes; but the convenient screened kitchen porch is found in but 32 percent of the homes.

Leeds found in 60 homes (largely urban) with incomes averaging $1575 the following items of household equipment: [1] 60 had sewing machines; 56 had carpet sweepers; 30 had vacuum cleaners and 2 others were expecting to purchase and 2 would purchase but lacked electric power; 30 had washing machines, and of 23 of these 19 were hand machines and 4 were power machines, so that about one in ten or twelve had a power washing machine. Twenty-five of the families had gas or electric irons. One had a cold mangle. Only four or thereabouts out of 60 used any power machinery in their homes. Some 23 families baked their own bread and of the 23, 16 had breadmixers; while 2 families had cake mixers. Only 6 families out of 60 had a fireless cooker, showing that this relatively inexpensive but economical agent is not yet at all widely distributed. There was no dish-washing machine in these families.

It is reported by the trade that 600,000 domestic washing machines were sold in 1922; this indicates that American

[1] Leeds, J. B. *The Household Budget*, p. 79, 1917.

homes will soon be generally equipped with power laundry equipment.[1]

Is the domestic power machine temporary?—There has been a curious back-eddy in the industrial revolution whereby as machines have been invented to do the work of the household on a large scale in the factory, there have often appeared simultaneously machinery to do the same work on a small scale in the household. When spinning and weaving were being established as a mill industry, household power machinery was also devised and introduced to a considerable extent. Thus Thomas Jefferson in 1812 introduced improved domestic weaving machinery costing $150 which was worked by 2 women and 2 girls and gave him the 2000 yards of material a year needed on his estate.[2] The foot-power sewing machine and latterly the electric-driven one have of course been available in home sizes as well as for commercial use.

All this is not a protest against industrializing housework or a sentimental gesture that housework must remain within the home, but rather a practical adjustment to utilize a margin of available labor within the home. That is, as things are, many families have not money to purchase the commercial product, for example, of a laundry service for all their clothing; but by securing suitable equipment to use in household operations they can secure the desired machine process that reduces labor. Ultimately as money incomes increase and as the commercial process is perfected and cheapened, household machinery for the laundry, for example, may possibly become as unknown as the domestic loom now is.

Cost of household equipment.—Theoretically the annual cost of permanent equipment includes the interest on the money value of the equipment, the repairs and maintenance cost to keep it in its usual condition and the depreciation

[1] Amer. Washing Machine Manufacturers Ass'n. Report of Educational Department, 10 S. La Salle St., Chicago.

[2] See Chap. VII, "Transition from Family to Shop and Factory Made Goods" in Tryon, Rolla M., *Household Manufactures in the United States.* The whole book throws light on the present situation in domestic work.

charge or annual value used up which summed up after a series of years will replace the article when it is finally discarded. With one-use goods, their annual cost represents the actual outlay within the year plus the interest on the stock of the particular item until it is used up.

Practically the cost of any item of permanent equipment should be measured in terms of the amount of service the equipment gives. The rule to find a single unit of cost would run: add together the annual cost of the equipment as given above, the annual cost for supplies and the annual labor cost, and divide this sum by the number of units of service rendered in a year in order to secure the cost per unit of service.

To illustrate let us suppose: (1) that an electric washer costs $150 and that it will last 15 years, after which it will be discarded—this may be called a yearly depreciation of $10; (2) that the interest on the cost of the machine is $9 a year; (3) that each year the repairs and supplies will average $2—these three items give an annual overhead charge of $21 or 40 cents a week. In addition suppose there are weekly costs for operation of—electricity, 10 cents; water, 25 cents; heating water, 50 cents; soap, etc., 15 cents, and labor for washing (not including ironing) $2.50. These charges added together make a weekly total of $3.90 for the washing cost, or $1.40 for costs other than labor, and also aside from the rental charge of the floor space used by the laundry work. Such a schedule of costs for using machinery or other household capital, if accurately determined, puts the housewife in a position to measure different methods of handling house work.

Machinery outside the home.—It has already been indicated what are some of the chief lines of mechanical service from without that supply the household, among others, the bakery and other food enterprises, the laundry, the cleaning company, and the central heating plant. Here this relationship will be examined in terms of two of these enterprises, the laundry and the heating company, and in addition the general principles of "public service enterprises" will be stated.

Domestic and commercial laundering.—The housewife may do her own laundry, with or without adequate equipment, or she may have a laundress come in by the day, or may send her laundry to a custom laundress who works in her own home, or to a commercial laundry for various types of service—full service, wet wash, and rough dry, now being developed in various modified forms by the laundry trade.

If laundry be done at home, the work might be done every other week or at longer intervals as a time-saving custom; at any rate, that is the custom in some European countries where the "big wash" may be done monthly,[1] or at longer periods. This saves in fuel and to some extent in labor, but requires a larger investment in the wardrobe and household linens.

The laundress coming by the day into the home is usually "first aid" for an overworked housewife; this is probably the most universal kind of domestic help in America. The advantages of the arrangement are its opportunity to give oversight, to control the processes; the disadvantages are that the housewife still carries the mental burden of the work, usually has to prepare a meal for the worker and often must give help with the work. The heating of water and supplies used are of course costs in addition to wages, in doing laundry work at home.

The laundress who takes materials to her own home is a greater relief to the household but doubts as to the character of service rendered have been raised by investigations of sanitary conditions. Where the housewife can be sure of the conditions in the home into which her laundry goes, this is a more satisfactory domestic method than having the work done in one's own home.

The commercial laundry renders fairly satisfactory service except for the more rapid deterioration of fabrics, and the scale of its costs. The man has universally accepted this service for

[1] See Wilson, Ellen Howard. "The Swiss Wash Kitchen." *Journal of Home Economics*, 1919, pp. 220-221. The "big wash" is an item in some European standard budgets.

his collars and starched shirts, and doubtless in time the whole family "wash" will follow to the commercial laundry. Fine starched work "cannot be done at home," by which we mean that present standards require the distinctive commercial product.

The commercial laundry will give an absolutely inclusive service for the family, that is wash, dry, starch, iron, so that the housewife need do nothing but pack off the laundry and receive it on its return, but such a service will cost from $5 to $10 a week per family in most communities. The cost of such a complete commercial service may, however, be not much more than home laundering costs if all outgoes in connection with the latter are counted—including rental value of laundry space, cost of equipment in interest and depreciation, supplies, and an allowance for labor. Where the housewife performs the work, she contributes its value to the family's living, and if she has some other way to contribute she may prefer to send her laundry out for a complete service.

Less complete commercial laundry services have also been available, of two types: wet wash and rough dry.

The laundry trade is just now developing six types of domestic service: [1] "Prim-Prest—washed in rain-soft water and mild suds; everything beautifully ironed; a dainty service complete in every detail.

"Ho-mestic—a medium priced ironed service, but no starch used; many laundries starch at additional charge.

"Rough-Dry—everything washed; knit underwear, hosiery, bath towels fluffed dry; flat work ironed; pieces needing it, starched; ironing left to be done at home.

"Float-ironed—low priced ironed service; flat work ironed; wearing apparel ironed unstarched and 70 percent finished; articles like shirts, dresses, will require some re-ironing at home.

"Thrif-T-Service—washed, rinsed, excess water removed;

[1] Advertisement of American Laundry Machinery Co., *Saturday Evening Post*, Dec. 9, 1922.

flat work ironed; other work damp ready for starching at home.

"Wet-Wash—everything washed and rinsed; excess water removed, returned damp ready to iron or hang up to dry."

Commercial laundry service as found in cities includes ten or more types, several of which have just been mentioned. "Hand laundries" in cities are often merely collecting stations for rough-dry laundries; they are maintained privately by their owners who work on the premises, doing ironing of shirts and other special materials. A true hand-laundry type in which fine work is done commercially and much of it by hand, is occasionally found; similarly, special laundries for washing laces, fine woolens, etc. The flat-work laundry does work for restaurants and hotels exclusively, specializing in table and bed linen and towels which are ironed on the mangle. The single-lot washing system has recently been adopted by a few commercial laundries in the family trade. It employs small individual wash-wheels, each large enough to handle one family's wash. This is quite different from the large wash-wheel with compartments for an individual wash but with wash water moving through all compartments in common. Under this separate washer system, while somewhat more expensive than the ordinary commercial type, it would be theoretically possible for the trade to give varied services as desired with different formulas at appropriate costs. Municipal wash houses and municipal laundries for relief in congested districts are becoming Americanized. Cleaning companies which do gasoline and other "dry cleaning," while not laundries in the ordinary sense, are important agencies in cleaning clothing.

Whatever commercial laundry service be used, the direct money cost for the service is increased by the wear and tear on fabrics which is heavier than in the home process. Doubtless much of textile wear and tear in the commercial laundry may be remedied by better controlled processes, by measurements of reagents used, of time of wash and rinse, etc., such attention as the better laundries are already giving. It would

be possible to use a straight domestic process in a commercial laundry but it would involve a longer time process and hence higher cost. It would be an interesting cost study to compare under commercial conditions the longer and relatively innocuous domestic process, and the shorter, more destructive commercial processes, and determine whether the present loss in fabric deterioration due to commercial speed is a loss or gain, and whether a slower, more careful process would cost more in labor time than the saving on fabrics would warrant.

Health and the laundry.—Among the health points to be considered in connection with laundries as of importance to laundryworkers are: wet floors, overheated and steam-filled atmosphere; gas fumes from poorly adjusted burners on gas-heated machines; excessive strain from long standing; injuries from constant operation of foot treadle machines, and from body pressure against machines; unguarded machinery; excessive over-time work; and, especially important to laundry worker and customer alike, the possibility of contagion from infected garments.

The evidence on the last point is that where the complete laundry process is carried out, including a full washing period, drying, and ironing with hot irons, pathogenic germs will not survive the process. But there are possibilities of laundried clothes, themselves sterile from the process, picking up infection or vermin from careless handling with soiled clothes. And sometimes the laundry process is not completely carried out, for example, in wet wash, so that clothes may not be completely sterilized.

A health code for laundries has been adopted in some cities. The New Orleans code requires a certificate from the Board of Health; the laundry may not be used as sleeping or living quarters; wash room floors must be drained; a separate drying room must be provided; water from an approved supply must be used; no person with a contagious or infectious disease may work in a laundry; infected clothing must first be disinfected by the Board of Health; a monthly inspection shall be made by

the Board.[1] A provision requiring approval of the location of new laundries and providing a public hearing, with opportunity for neighboring property interests to be heard, is included in the San Francisco Health Code. Seattle also has set health standards for the laundry business.

The New York City Sanitary Code includes regulations in regard to conduct of laundries, which provide that the floors of wash rooms must be water-tight and drained. Rooms must be properly and adequately lighted; ventilation by natural or mechanical means is required. Safety devices are to be provided. All clothes are to be washed in water of a temperature of at least 200° unless they are subjected to that temperature in the process of drying or ironing. Washed clothes are to be kept separate and apart. Eating or cooking is forbidden in laundry rooms. Washing and toilet facilities must be provided.

Control over location of laundries is properly provided in city districting plans under which the laundry is considered a business and so ruled out of residence districts; it might possibly be declared a semi-nuisance business and so restricted to certain limited business districts.

Sanitary Conditions in Public Laundries.—An investigation made by the New York City Department of Health [2] using bacteriological tests and experimental methods gave the following conclusions regarding "hand" laundries and steam laundries:

HAND LAUNDRIES

1. The sanitary conditions existing in the average "hand laundry" managed by white persons are of a very low grade, falling far below those existing in Chinese laundries.

2. The State factory laws concerning living quarters are violated in both Chinese and "hand laundries."

3. All clothes sent to the average Chinese laundries are

[1] Ordinance No. 800, Commission Council Series, 1913, Mayoralty of New Orleans.

[2] New York City Public Health Reports, Vol. 32, No. 6, 1917.

washed and dried on the premises; in separate rooms maintained for this purpose.

4. The use of the "blow can" for dampening clothes is universal in Chinese laundries and may lead to infection.

5. The methods employed in the average "hand laundry" of marking and sorting the clothes are unsuitable and a possible source of danger to the health of the employees and community.

6. Very little washing is done in the average hand laundry. The practice now prevails of tightly packing a heterogeneous collection of soiled clothes into large bags or nets. These nets are then sent to the steam laundries, where they are washed as units and returned to the hand laundries wet.

7. The drying facilities employed in the hand laundries are limited and of a very primitive type. The process is not such as would secure the death of all the pathogenic germs which may have survived the washing process.

STEAM LAUNDRIES

8. The comparatively few steam laundries which use standard routine methods of washing and keep a record of the time, material and solutions employed are getting better results than the average establishments.

9. The methods employed by steam laundries in the collection and delivery of clothes are found to be defective in many respects in a considerable proportion of the laundries. Soiled and clean clothes are carried on the same wagon and come into direct contact with each other. They are also frequently sorted in close proximity, as comparatively few establishments maintain separate receiving rooms where the clothes may be properly handled.

10. In the majority of laundries the clothes are washed under conditions prejudicial to the health of the employees, the "washers" being usually located in basements, poorly lighted and ventilated, with defective floors, and without adequate provisions for the disposal of waste water and steam.

11. The method at present commonly employed by certain steam laundries of returning "wet" clothes to the patrons and to hand laundries is a possible menace to the public health.

12. Wet clothes infected with bacteria and subjected to the action of the usual degree of heat found in drying houses,

tumblers, mangles, and hot presses are freed from living organisms.

13. The practice of "wet washing" as now done in steam laundries is unsanitary. The miscellaneous character of the contents of the nets prevents the proper application of disinfectants, soap, water and heat, and thus permits the survival of vermin and pathogenic organisms. The size of the nets and the methods of tight packing employed prevent the penetration of water and heat in the allotted time.

14. Owing to the difficulty of ascertaining whether clothes have been properly heated during the washing processes and the possibility of the transmission of infection when not properly treated, all clothes washed in steam laundries should be dried upon the premises.

15. The absence in the average steam laundry of proper sorting rooms for the clean linen and the consequent contact with soiled linen may result in a possible reinfection of the clean clothes.

Laundry for the rural home.—The farm home may have its own power laundry—Miss Ward found a laundry machine in 57 percent of rural homes; it may, theoretically at least, join with others in forming a cooperative laundry; it may patronize a town laundry if one is at hand; or it may ship its "clothes" to a distant laundry.

A rural cooperative laundry organized at Chatfield, Minnesota,[1] in 1912 in connection with a cooperative creamery had about 200 stockholders owning one or more $5.00 shares (an average of about $10.00) and had about as many patrons, in 1919. About 38.5 percent of the trade is from the country, 39 percent from Chatfield, and 22.5 percent from other towns. The farmers bring in their laundry when they bring in cream. In 1917 it did $6750 worth of business; in 1921, $9026. In the former year, 66.5 percent of receipts went for help, 29.5 percent for supplies and repairs, and 4 percent was held as

[1] Bull, Mary L. "The Chatfield Laundry—After Six Years." *Journal of Home Economics*, 1919, p. 222. See also *Review of Reviews*, 48, 1913, p. 241; U. S. Department of Agriculture Year Book, 1915, p. 189; "Start a co-operative laundry," Agriculture Extension Division, University of Minnesota; and letter from Chatfield Co-operative Laundry, Jan., 1922.

reserve; in 1921, 75 percent went for help, and the reserve was drawn upon for $125. The staff consists of a superintendent, a forewoman, half a dozen young women and a delivery boy. The charge (1922) is six cents a pound for rough-dry family work, with a small special charge for ironing, for example one cent for handkerchiefs, one-half cent for towels. Delivery is charged for extra at 10 percent of the bill. In 1917 about eighty family washings a week were being done at an average cost of $1.37.

The Chatfield laundry is incorporated and capitalized for $5000, but in 1922 only $2015 of stock was outstanding. The laundry building is part of the creamery plant and was erected at a cost of $3000 by the Cooperative Creamery Association which rents it with steam power furnished to the Laundry Association at $750 a year. The equipment was installed by the Laundry Association at a cost of about $3000 and is now carried on its books as worth $2275. It consists of about fifteen items, 3 washers, extractor, ironers, dry room, etc.[1] The achievement of the Chatfield cooperative laundry should be widely heralded throughout the country. It has accomplished the essential thing that the city commercial laundry has not done: namely, taken the family washing out of the house of the moderate-income family by rendering an efficient acceptable service at a minimum cost. "Our prices average 40 percent under other laundries" partly explains its success in solving the home-washing problem. The assistance of the cooperative creamery has evidently kept down the overhead costs and been largely responsible for the successful outcome, but it would seem possible to duplicate the record

[1] The financial statement for 1921 shows: Resources—Machinery and fixtures, $2275; accounts receivable, $734.95; stock and materials, $412.20; cash, $393.55; total resources, $3815.70. Liabilities—Capital, $2015; sinking fund, $1650.70; bills payable, $150; total, $3815.70. The receipts and payments schedule shows: Expenditures—Inside help, $6293.99; driver, $478.22; power and rent, $750; machinery, $12.23; cotton, padding, $79.43; starch, $26.39; lime, blue, $16.35; soap, $236.73; soda, $120.29; gasoline, $90.78; sundries, $102.53; paper and twine, $67.77; office, $18.57; freight, $118.76; commission, $625.45; interest on capital, $115.20; total expenditures, $9152.69. Receipts—From work, $9026.97; from sinking fund, $125.72; total, $9152.69.

elsewhere even as an independent undertaking, although costs would be somewhat higher.

An urban cooperative laundry has been operating for two years in Greenwich Village, New York City, with increasing success.[1]

The community and the laundry.—The commercial laundry has had attention in labor investigations and legislation since it is an industry subject to over-time work, because its load is unevenly distributed throughout the week and since 71 percent of its wage-earners are women (1910).[2]

The United States Census in 1910, published its first report on the power laundry industry and repeated the study five years later.[3] The census facts for 1914 showed that during the preceding five years, while the population had increased only 7.1 percent, the number of power laundries had increased 17.6 percent (to 6097), the number of wage-earners employed had increased 19.3 percent, the capital invested had increased 42.2 percent, and the amount received for work had increased 36.1 percent.

Smaller communities interested in securing power laundries will be interested to know that about one-fourth of all laundries in the country (23.9 percent) did an annual business of less than $5000, with an average of less than 3 employees, and 45.2 percent more of the laundries did between $5000 and $20,000 worth of business; 26.7 percent did between $20,000 and $100,000, and only 2.7 percent did business over $100,000. Forty percent of the laundries were in districts outside of cities of 10,000 or more population (1914).

Central station heating.—In an increasing number of communities it is possible to buy heating service for the household as one buys water or gas. Two types of central

[1] Van Deeman, Ruth. *Journal of Home Economics*, 1923, p. 252.

[2] See Report of Women and Child Wage-Earners in the United States, Vol. 12, on employment of women in laundries.

[3] Census of Manufactures, Power Laundries, 1910, and 1915. In the 1920 Census a laundry report for each state is given in the state bulletins of the Census.

heating service[1] are provided, hot water and steam heat—the latter is said to be used by 90 percent of the companies and is preferred by them as it is possible to meter the service accurately and thus adjust the charges accordingly, whereas hot-water heat cannot be metered. Hot-water heat is, however, popular with consumers, as it gives a mild, steady heat; in many cases the exhaust steam at electric light and other power plants is used to heat water for a central hot-water heating service.

Central heating service is usually priced so as to cost a little more than the operation of a private heating plant, the consumer being willing to pay more, it is assumed, because of the convenience and saving in work. Prices are set in various ways: for hot-water heat the charge for the season is usually 15 to 25 cents per square foot of radiation surface in the radiators; thus 600 square feet of radiation in a small six room house at twenty cents a foot would cost $120 a year whereas six tons of coal for a private furnace would cost say $80. A similar flat rate for steam radiators might cost 25 to 35 cents per square foot; but steam transmits perhaps fifty percent more heat per square foot—so the 400 steam radiator feet required, at thirty cents, would cost $120. Sometimes rates are charged according to a formula which measures the square feet of glass in windows, square feet of exposed wall, and cubic feet of contents of the house. With steam service, accurate metering of steam may be used as basis of charges. Another type of central heating is that of the steam maintenance system under which the company's agent operates the boiler in the owner's house and furnishes him steam on a meter basis.

There were about 400 district heating plants in the United States in 1920, many of the larger ones located in the business districts of large cities, but many providing a residence serv-

[1] Orr and Bushnell. *District Heating*, published by Heating and Ventilating Magazine Co., New York. *Heating and Ventilating Magazine*, New York. Proceedings of National District Heating Association.

ice. What is being done is indicated by the results on a 35 acre development, which includes 404 nine-room dwellings and 77 twelve-room dwellings and a thirty-two-room house, and which has a centralized heating, lighting and hot water service. To an investment of $478,000 for land, and $2,108,461 for the 485 dwelling units was added a power plant costing (1915) $382,000, or 18.1 percent of the cost of the buildings. The power, heat, and light plant in the year 1917 cost $31,635 to operate, including wages (10-11 men) $13,567; fuel (7500 tons of buckwheat coal) $16,778; ash removal and engineers' supplies $1290. Pro-rating for the 485 families receiving the services, the more important items of cost per family were: land $985; dwelling $4346; power plant cost $787; annual operation of power plant $65.43 (not including charges for interest, depreciation, taxes, etc.).[1]

Central heating can be introduced anywhere in urban communities and can be economically provided wherever exhaust steam goes to waste as it does in most power plants. The inquiry as to local possibilities is worth making in any community.

Central water heating is a community enterprise that may be introduced along with central heating, or as an independent service. It has been introduced in several instances in England as part of the government's construction of houses. The conferences on housing conducted by women's organizations in England have been urging community services of this kind. It was estimated that the hot-water service could be provided for 1s. 2d., or say 30 cents, a week per house, covering installation, fuel, and labor.[2]

Public service companies.—Individuals, firms, or corporations that furnish water, gas, electricity, transportation, telephone and other essential and universally used services, which by the nature of their business tend to become monopolies,

[1] Information by personal letter.

[2] *Women and Housing. Labor Saving in the Home.* Garden Cities and Town Planning Association, London, 1920.

are now commonly under state supervision as to the quality of service they render and the prices charged to consumers. The principle is that since competition will not control these monopoly businesses the government must do so, particularly as their services are required by practically every household and business in the state.

Public service commissions should have power: (1) to ascertain the value of properties used by a service company (since the investment is one basis of rates charged); (2) to prescribe methods of keeping accounts and require regular reports; (3) to control new issues of stock and bonds; (4) to supervise the services rendered; (5) to fix the rates charged; (6) to approve or disapprove franchise grants to such companies, that is, the privilege of using public streets.[1] This supervision is given by official public service commissions which from time to time announce public hearings on questions at issue. At such hearings consumers interested should be represented, especially by organizations such as federations of women's clubs and home bureau associations.

The possibility of control of service corporations turns in part upon the nature of the franchise or contract of privileges granted by the municipality. This should be drawn so as to secure adequate service and reasonable charges; it should run for a limited term of years at the end of which it expires and may then either be revised or renewed with the original company, or with another one; other clauses may be added giving the city permission to buy out the company sooner, or providing that the city share in excess profits above a maximum allowed the company.[2] On such franchise terms and governmental oversight, may turn the possibility of securing at a reasonable cost what Bruere terms our "Lady of Public Service" as general housemaid for the community.[3]

[1] Downey, E. "Regulation of Urban Utilities in Iowa"; quoted in Marshall, Wright, Field. *Materials for Study of Economics,* pp. 291-299.

[2] Beard, C. A. *American City Government,* 1912.

[3] Bruere, M. B., and Robert W. *Increasing Home Efficiency.* Macmillan, 1914, p. 292.

CHAPTER XIV

HOUSEHOLD OPERATION—HIRED LABOR

The two preceding chapters have discussed certain problems of housekeeping, or household operation, including first the central question of housework or the general problem of labor and management in the home; next, the relation of equipment in the household to the performance of housework, and the services rendered by outside commercial companies in taking over part of the work of the home. In this chapter there is considered the performance of housework by hired workers coming in from outside.

The "domestic service problem," or the household employment problem, is a matter of lack of agreement between the supply of competent persons ready to undertake housework for hire, and the demand for such persons. It concerns both the number of workers wanted and the number ready to work, and the qualifications presented by would-be workers and those desired by would-be employers. Judging by the newspaper importance of the subject, there has always been an unsatisfied demand for "good servants."

Studies of domestic service.—*Domestic Service* by Professor Salmon of Vassar College,[1] presents the history of domestic service in America, analyzes its social and economic aspects in the light of information furnished by some 2000 employees and employers (1890), and offers recommendations for the improvement of conditions. The background of our modern problem is found by Miss Salmon in the earlier forms

[1] Salmon, Lucy H. *Domestic Service.* New York, 1897; second edition 1901. Also chapters in her *Progress in the Household,* 1906. Also "Democracy in Household." *American Journal of Sociology,* 1912.

of service, the indentured servant, the slave worker, and the neighbor's daughter who came in as "help," as well as in the modern problem of the immigrant worker. The economic factors of wages, hours, probabilities of promotion, and living conditions, and especially social factors such as the use of the first name in address, the special garb, the feeling of inferiority which is expected—all of these have put a social stigma upon domestic service, and lead young women to choose other lines of employment rather than this. Miss Salmon's program for progress is sound in that it urges that household labor must be brought into general currents of industrial progress, and that the influences which have made for general industrial betterment will help here, such as organization, publicity, specialization of household trades, and transfer of work outside the home, education and the like; profit sharing which she lists as a hopeful influence, due to the widespread experiments with it in general industry at the time, has not proved its value in the household. Miss Salmon's scholarly book stimulated discussion and has been responsible for much of the progress since secured. About the time of Miss Salmon's book Miss Jane Addams made her thoughtful appraisal of household service as the "belated industry." [1]

The Household Aid Company, 1903-1905, was a Boston experiment directed by a Committee which included Alice Freeman Palmer and Ellen H. Richards among its advisers, and which undertook to furnish trained household workers in a by-the-hour service on call. The Company established a headquarters' house, where the Household Aids were to live, gave them training under competent Home Economics instructors, and conducted the experiment for two years, at the end of which time the undertaking was given up and a report of the experiment made. While the enterprise was subsidized so that it might not be hampered, the committee in charge ex-

[1] Addams, Jane. "A Belated Industry." *American Journal of Sociology*, March, 1896; reprinted in part in *Journal of Home Economics*, 1919, pp. 355-364; see also, Miss Addams' *Democracy and Social Ethics*, chapter "On Household Adjustment."

plored the commercial possibilities of what they hoped might be organized as a regular business. The experiment was ahead of its time, however, and the company was disappointed in the critical attitude of the public, the lack of appreciation of trained workers, the unwillingness to pay more for a skilled worker, and the low and varied standards of housekeeping which made part-time service in different homes difficult. The company also had difficulty in securing a supply of workers, or "aids," partly because of the uncertainty of securing full-time employment, the need of adapting oneself to different temperaments and standards as one went from house to house, and the standards and cost of living in the Company's house. Employers were disappointed in not being able to secure all the kinds of workers desired, in the differences between their own methods and those which the Aid had learned, and in the costs of skilled work which seemed high compared with the unskilled labor which they had used. But in spite of disappointment on all hands, and the negative results secured, the Household Aid Company is an outstanding experiment which any one desiring to-day to inaugurate service by the hour should not fail to review.[1]

Another Boston enterprise was the Domestic Reform League of the Woman's Educational and Industrial Union, which for a dozen years, beginning in 1897, made surveys of local conditions in domestic employment, issuing various studies, starting a school for domestic workers, conducting an employment bureau, stimulating statistical surveys by the Massachusetts Bureau of Statistics of Labor, and publishing for a time a quarterly *Bulletin of the Domestic Reform League.* Some of the studies made in cooperation with the State Labor Bureau concerned hours of labor, social conditions in domestic service, trained and supplemental employees in domestic service (which followed up the problem of the Household Aid Ex-

[1] Household Aid Company, Report of a Two Years' Experiment in Household Economics; Woman's Educational Association. Boston. Copies of the pamphlet may be obtained of the *Journal of Home Economics,* Baltimore.

periment), and the cost of homemade versus commercially prepared food. Studies were also made of *Immigration as a Source of Supply for Domestic Workers,* of *The Law of Employer and Domestic Employee,* and of *Employment Offices in Boston.* A standard form of contract for domestic service was one of the League's contributions. The Domestic Reform League was an intelligent, persistent, and far-sighted local movement to improve conditions in household employment, and it might well be copied in other large cities.

The labor problems involved in domestic service were analyzed in a paper by Dr. I. M. Rubinow in 1906, which with the other papers by the same writer gives us our best statement of the economic facts and tendencies involved in the reorganization of this field.[1] Dr. Rubinow calls for the same standards in domestic employment as have been adopted in other labor fields and these standards, he shows, are gradually being adopted. Domestic service, with agricultural labor, remains the one trade, he points out, which receives its pay in kind as well as in cash, and the room and board which the domestic worker is asked to take as part payment for her work is often a depreciated currency. Her hours of work have remained unlimited and indefinite, subject to the caprice of the employer, while all other trades have achieved a standard work-day, as well as a standard wage. Living-in puts the worker quite at the mercy of the employer as regards uncertain hours of work and deprives of personal liberty. Tasks in the household are themselves uncertain, varied, and unorganized, while work in other fields has been reduced to a more definite routine. These economic conditions make normal personal life impossible and are a barrier to marriage and a home of one's own. The stigma on housework is primarily due to unequal economic conditions. Dr. Rubinow's program for progress calls for an absolutely cash wage, the

[1] Rubinow, I. M. "The Problem of Domestic Service," *Journal of Political Economy,* 1906, pp. 502-519; also *Journal of Home Economics,* 1911, p. 131; *American Journal of Sociology,* March, 1909; *McClure's,* March, 1910. The first article carries statistical tables of interest.

living of the worker in her own home away from her place of employment, and a limited work-day to be secured by the worker's own efforts, and other economic changes that will equalize conditions in the domestic field with those in general industry.

In 1915 the Household Employment Commission of the Y. W. C. A. made a report to that organization and later issued a study called *The Road to Trained Service in the Household*.[1] This Commission shows that young women commonly prefer work other than housework, and uses as its data 300 interviews with domestic workers, saleswomen, industrial and office workers; it makes a clear statement of the advantages, as well as the disadvantages, inherent in household work in its present form. The report called for reform in the way of a definite work-day, definite duties, and freer life for the houseworker.

One of the practical outcomes of the Y. W. C. A. investigation was a program inaugurated in 1919 by a committee[2] of the Y. W. C. A., the United States Employment Service, and certain New York interests, known as the "Committee on Home Assistants." This called for an eight-hour day and forty-four hour week in housework, with the employee to be known as a home-assistant, living outside the home as other workers do. This plan, as originally outlined by the Employment Department of the New York City Y. W. C. A.[3] and later promoted by the Home Assistant Association of New York is to provide a supplement to, not a substitute for, the "resident worker who finds in domestic service a home, whose relations with her mistress are harmonious, who belongs to the traditional 'servant group.'" It tries to provide "a new type of worker—the trained business-like assistant for the business-

[1] First Report of the Household Employment Commission, 1915, and *The Road to Trained Service in the Household*, National Board, Y. W. C. A., New York.

[2] See *Monthly Labor Review*, U. S. Department of Labor, Aug., 1919, p. 207.

[3] *The Home Assistant: Why She Is, What She Is, How She Works.* Employment Department, Y. W. C. A., New York City.

like housewife employer." The home assistant may work either part time or for a regular eight-hour day. She performs any work required, with the exception of heavy washing. She "sleeps and eats away from her place of employment, pays her own carfare, uses the front door, wears suitable dress but not a uniform, and is called by her last name and title." She is paid a sliding scale not to fall below the current wage standard, "with increase in pay dependent upon efficiency and length of service. No tips are given but overtime pay is given at the rate of one and a half times the regular amount." The Home Assistant Association which was maintaining an agency or employment service in 1922 reported the difficulty of securing the trained home assistant; intelligent women seem to be available, can one but find channels to reach them, although there seems to be lacking a knowledge of good cooking.[1] The Association, in addition to its form of contract covering the points above, furnishes daily schedule cards, overtime and under-time record cards, and menu leaflets.

The eight-hour day in housework, the trained home assistant, and service by the hour are reforms now under way in different American cities. In Providence, Rhode Island, for example, the Housewives' League has provided an employment bureau (1918) which in a single month placed 10,000 hours of by-the-hour service in the homes of its members. In other New England cities, as well as in New York and its suburbs, there has been a similar movement toward the part-time worker. Mrs. Berkeley, of New York, one of the early experimenters in this field who found she could get a better type of worker for an eight-hour day, pointed out that programs of broken hours can be readily arranged either for one or for two or more workers; so that service can be organized to meet the needs of the employer and still provide time-off for meals and rest for the worker.[2] Important also is the

[1] Letter of January 5, 1922.

[2] Barker, C. Helene. (Berkeley) *Wanted: A Young Woman to do Housework.* New York, 1915. For another experience, see Child, Georgia B.

possibility that such part-time or broken-time employment may enable the ambitious worker to earn her living while continuing her education in high school, trade school, or perhaps as a part-time student in college or university.

Other American studies of household employment to be mentioned include: Frances Kellor's *Out of Work,* which probed the employment office situation; Lillian Pettingill's *Toilers of the Home,* a record of the experience of college women going into service to collect facts at first hand; the Maine Department of Labor's study of wages (see below); J. B. Leed's *The Household Budget* and Florence Ward's *The Farm Woman's Problems.*

An inquiry directed to State Labor departments in 1915 indicated that 4 of 31 states replying had collected some facts regarding domestic service; in 14 out of 29 states replying there was public supervision of private intelligence offices or employment agencies that deal with domestic workers; seven states reported labor organizations of hotel and restaurant workers in which domestic workers join but no distinct household workers unions were reported. The Massachusetts Bureau of Statistics of Labor published in 1906 a study of the attitude of 260 housekeepers to trained and part-time employees,[1] which gives an excellent analysis of certain economic factors in service.

Some stories with a plot that include the service problem have contributed to the break-up of traditional ideas, such as Kathleen Norris' *The Treasure* (the trained home economics worker who went into service on a professional basis), and Charlotte P. Gilman's *What Diantha Did,* a woman who or-

"The Eight Hour Day in Operation," *Journal of Home Economics,* 1921, pp. 132-136.

[1] This study (*Trained and Supplementary Employees in Domestic Service,* pp. 87-124, Report for 1906 Massachusetts Bureau of Statistics of Labor) was made in cooperation with the Domestic Reform League; other earlier studies of the Bureau and the League include: *Social Conditions in Domestic Service, The Effort to Attract Workers to Domestic Service,* and *Hours of Labor in Domestic Service.*

ganizes a service company to relieve the housewife. In this connection, there is also to be taken into account the ceaseless succession of magazine articles giving the personal experience of employers, many of them carrying useful suggestions for progress.[1]

Legislation regarding household labor.—The wage-earning household worker has received very little consideration in labor legislation, and protection has been denied that ought to be extended. As regards child labor laws, the domestic worker has been entirely overlooked, or if she has been considered, it is in such a provison as that of Pennsylvania's child labor law, which excludes the domestic worker from the benefits of the law. The Pennsylvania law provides that its restrictions on children 14 to 16 years of age shall not apply to agricultural or domestic labor, and a similar exception was granted in the standards adopted by the national conference on child welfare, although it has been questioned vigorously.[2] One might grant the wisdom of such an exception, if it applied to children working in their own homes or on their parents' farms. As an exception which permits children of 14 to 16 years to go into domestic work in other homes, the law should be challenged, and its provisions repealed. The chance for meeting conditions in domestic service that make for moral breakdown is so great that it would be better to raise the age standard to 18 years, rather than to regard household work as one in which children may wisely be employed. Yet nearly 40 percent in domestic and personal service in 1910 were under 20 years of age, and 11 percent under 16 years.[3] Legal restrictions on child workers in domestic service should be provided. Fortunately, from 1910 to

[1] See *Readers Guide to Periodical Literature.*

[2] Letter of Miss Abbott, Chief of Children's Bureau.

[3] The Census of 1910 shows that 1,000,610 "servants" (not otherwise specified) were distributed as follows by age groups: 2 percent were from 10 to 13 years of age, 9 percent were from 14 to 15 years of age, and 27 percent were from 16 to 20 years of age; so that 39 per cent in all were not over 20 years of age; 48 percent were from 21 to 45 years of age and 12 percent were over 45 years.

1920 the numbers of small children in service decreased, the number from 10 to 15 years of age decreasing 51.9 percent and 10 to 13 years decreasing 62.7 percent. But still in 1920 of 1,060,858 children between 10 and 16 gainfully employed, 54,006 or 5.1 percent were in service and of the 378,063 children between 10 and 14, 12,172 were in service.[1]

As compulsory accident insurance develops, and if similar health and old-age insurance for employees is developed, the question of whether domestic workers should be included in benefits must be faced. The higher type of professional domestic worker beginning to appear may perhaps carry her own insurance.

Most of the American states now have a compulsory accident compensation system whereby employers must carry insurance to cover accidents to employees, but not including household employees. So far, the New Jersey laws alone give this special protection. The cost to employers is $6 a year for an accident insurance policy to cover one or two house employees. That domestic workers are exposed to risk of accident was disclosed by an informal survey made for the writer as to the experience of some twenty-six housekeepers in and about New York who were asked to report the accidents which had occurred to their own employees in the course of previous years of employment. The survey revealed a considerable number of accidents including two broken limbs, three sprains, three infected fingers, one scalding, and one case of death through a gasoline explosion, in a total of 280 years of service rendered in twenty-six different positions or an average of one serious accident for every twenty-eight years of service rendered.[2] "Housemaid's Knee" is of course a disability occurring in this occupation.[3] Health conditions in domestic service are reputed to be bad, though doubtless they are improving. A Medico-Actuarial

[1] Census of 1920, Occupations of Children; also Report of U. S. Children's Bureau.

[2] See also *The Travelers Standard,* Aug., 1918, Travelers Insurance Co., and *Safety in the Household,* U. S. Bureau of Standards.

[3] Kober and Hansen. *Vocational Hygiene,* pp. 444 and 700.

investigation in 1913 disclosed 188 actual deaths among a group of domestics carrying insurance, with regard to whom the number of expected deaths was 127, or an excess of almost 50 percent.[1]

Hours of domestic labor.—California in 1921 repealed a law[2] which specifically stated that "the entire time of a domestic servant belongs to the master and the time of other servants to such extent as it is usual in the business in which they serve not exceeding in any case ten hours in the day." In repealing this 24-hour day for domestic workers, no standard time was set, but California has had, by a law adopted and amended respectively in 1911, 1913, 1917, and 1919, a standard eight-hour day, forty-eight-hour week, for women in manufacturing, and certain other fields, which applies to laundry, hotel, lodging house, apartment house, hospital, place of amusement, and restaurant workers; and in 1921, a bill requiring a ten-hour day, sixty-hour week in domestic service was presented but failed of passage. This 1921 California proposal was that the hours might be so arranged as to permit employment at any time, provided the total hours did not exceed ten in any one day.

The service contract.—The contract between employee and employer in domestic service is often not explicitly stated and hence, if questioned in court, will likely be interpreted in terms of local custom. Standard contracts have been issued by the Woman's Educational and Industrial Union, Boston, and the New York Legal Aid Society.[3] The latter's contract provides for specifying: engagement, as one month, and its renewal from month to month; the duties of the position; the compensation; the method of terminating the contract, as by giving one week's notice before the expiration of any month; that either party will pay a week's wages to cover expenses and loss of time if the contract is broken; and that the first

[1] Letter of Frederick L. Hoffman, Prudential Insurance Co.
[2] By Chap. 99—Laws of 1921 repealing Section 2013 of the Civil Code.
[3] *Domestic Employment—A Handbook*, New York Legal Aid Society, 1908.

week is to be a trial week during which either party may terminate the contract on one day's notice. The New York Home Assistant Association referred to above put out a five-point contract (1919) for "assistants."

Standards in public housekeeping.—Women employees in hotels, restaurants, boarding houses, and certain public housekeeping industries have secured by law standards such as the limited work-day, or limited work-week, one day's rest in seven, a minimum wage, in the states of California, Oregon, Washington, North Dakota, and Massachusetts, and District of Columbia, the precise standards varying in different states,[1] and these standards may bring similar standards ultimately in domestic employment. Whether such restrictions in public housekeeping come by law or by union demands, it is a fact that the old 7-day week in hotel and restaurant work is gradually giving way to a 6-day week. The United States Bureau of Labor reports (1920) that nearly half the men and more than half the women working in hotels and about one-third of the men and one-fourth of the women working in restaurants in cities investigated are, however, still working a 7-day week;[2] the 6-day week has made most headway in larger cities and in the west.

Detailed rules in the state of Washington have been set by an official "conference" of public housekeeping employers and employees whose most recent recommendations (August 1921) as adopted by the State Industrial Welfare Commission, and applying to public housekeeping occupations in hotels, rooming and boarding houses, restaurants, settlement houses, hospitals (except for nurses) and philanthropic institutions, are as follows: The weekly wage to be not less than $14.50 per week of forty-eight hours or $2.50 per day of eight hours or thirty-five cents per hour; no individual to be employed more than six days a week except in emergency, when a continuous period not exceeding ten successive days may be worked at the

[1] *Labor Legislation for Women*, U. S. Bureau of Labor Statistics, 1921.
[2] *Monthly Labor Review*, March, 1920, p. 91.

expiration of which one day's rest should be given, with at least four days' rest within any twenty-eight day period; more than five hours shall not be worked without a rest period of at least half an hour; uniforms if required are to be furnished and laundered by the employer; when board is furnished, ninety-five cents per day may be deducted or twenty cents for breakfast, thirty cents for lunch, and forty-five cents for dinner; for furnished room, two dollars per week may be deducted.

This progress in public housekeeping will ultimately mean similar standards for domestic housekeeping; for as soon as domestic workers show the possibility of securing limited hours in housework, one may expect legal standards to follow.

Wages in service.—Samuel Pepys recorded in his immortal Diary on a certain day in 1660: "Paid £ 4. ($20) per annum, for a cooking màid, the highest that I ever paid in my life." One hundred and forty years later in 1800, a family record shows in Concord, New Hampshire a payment for "help, 50c a week" or $25 a year. As Dr. MacGill, in *The Myth of the Colonial Housewife* [1] points out, low wages in domestic service in the colonial period were a result of the surplus of women workers in the home, and the low money compensation given then has become a traditional factor that depresses the wages paid in service to-day.

Miss Salmon pointed out from her data (1890) some facts that in large part probably still hold true: wages in service vary in different sections; the skilled specialized worker, a cook or waitress, is paid better than the general houseworker; foreign born are paid better than native born (because they are found in cities, are relatively of a better class than the native born, and because Negro workers included among the native born get lower wages); men are paid better than women in similar posts; wages are relatively better in service than in other employments open to women when one counts all conditions—for example, there are few opportunities for advancement in wages in service, but wages are not often reduced by

[1] MacGill, Caroline E. *Independent Magazine,* Dec. 15, 1910, pp. 1318-22.

unemployment or loss of time and the scale of spending does not demand so expensive dressing, so that there may be a larger margin for saving in service than in industrial work.

Total wages, money and living.—In estimating the cost of full-time service, where the worker lives in the home of the employer, it is safe to assume that it is costing in payments in kind and in indirect costs as much as the money wage; so that twice the money wage is an approximate measure of total cost. With workers by the hour, the money wage represents more accurately the entire cost.

A Maine study (1910) found a median wage of $4 a week and estimated the worker's living as worth as much more.[1] A Massachusetts study (1906) found an average wage of $3.80 in one-employee households, $4.35 in two-employee households and $4.67, $5.14, and $5.46 respectively where three, four, and five workers were employed. The living in the one-employee household was estimated as costing the employer $3.54.[2] The Department of Agriculture showed in 1912 farm household labor to receive a country-wide average of $10.39 a month, with a higher short-season monthly rate than the rate paid in an annual contract; further, there was a variation between different sections of the country of 300 percent in the wages paid.[3] In 1921, a dozen urban housekeepers in different states reported laundresses' wages that varied from 15 to 75 cents an hour, and monthly wages that varied from $22 to $85 a month, a range of 400 to 500 percent.

Tips are a feature of household wages particularly in larger organized households, where there are several workers, and in public housekeeping as with waiters, porters, janitors, etc. Miss Salmon believed that tips in part create the "stigma" on domestic service. Tips are illegal in several states. Some hotel and restaurant managers oppose them, as do the organized Commercial Travelers. Professional standards for house-

[1] Maine Industrial and Labor Statistics, 1910. Summarized in Leeds, J. B. *Household Budget*, p. 104.

[2] Massachusetts Bureau of Statistics of Labor, 1906. Part II, p. 112.

[3] U. S. Agricultural Department, Bureau of Statistics Bul. 99, 1912.

workers will help more than anything else to check the custom of tipping in the home. The commission from food dealers often secretly taken by houseworkers is a somewhat parallel economic factor in wages.

Service cost in relation to income.—Assuming that a hired worker costs to-day an average of $2.50 a day, a laundress or other worker may be had one day a week on an income of $2000 or $2500; and two days a week on $3500 more or less. Assuming that a full-time worker receives an average of $40-$50 a month for wages, plus $25-$30 a month for room and board, and incidentals, or $75 or more a month, such a worker can scarcely be regularly afforded on an income of less than $5000 or $6000 a year; two workers may if desired be afforded on $9000 to $12,000 a year, and three on $15,000 a year. But on all these incomes, other expenditures, the automobile, for example, are competitors with household service, except with that minimum of service which is regarded as absolutely essential.

Supply of workers.—Several studies of service have concerned the problem of supply. The succession of immigrant groups including Irish, German, Norwegian, Finnish, and Polish young women, with occasional professional servants from England and France, have been one feature of the situation.

The new American policy of restricting immigration will reduce the supply from abroad. The opening of industrial employment to women before, during, and since the war, has reduced the supply willing to go into service, and this is a permanent factor to take into account. The migration of Negro workers about the country is already a factor of importance.

The hope for the future's supply lies in making conditions in service as satisfactory as are other lines of employment so as to attract a better grade of worker comparable to the trained office worker. With the transfer into shop employment of the cruder type of worker who has been the household's reliance

for the last generation it should be possible to find for household work a worker with the same intelligence and outlook as the clerical or business worker. The whole movement to rationalize housekeeping will be a further influence to level up the grade of domestic employee.

Information regarding positions and possible workers in private household work is provided: (1) through employment "agencies" such as "intelligence offices" and Government employment bureaus; (2) through newspaper advertisements, and (3) occasionally through special organizations such as the Housewives Aid Society of New York [1] and the Housekeepers Alliance of Washington, which maintain lists of workers; and (4) informally by recommendations from friends. Domestic employment agencies are under a license system in progressive states that is intended to prevent extortionate dealings and sending young women into immoral surroundings.[2]

Houseworkers' unions.—Labor organization has been extended to the domestic field in several instances. The first American houseworkers' union was formed by household employees in Chicago about ten years ago, with a program of demands as follows:

"One day a week off, either a full day or two half days; in apartment buildings, use of passenger elevators; in houses, light for back stairways, or use of front door; no dishes left to wash after day off; ladies' maids not to work after 8 p. m.; after six months' service, one week vacation with pay; after one year's service, two weeks' vacation with pay."

This "Household Workers' Association of Chicago" struggled on for some time, but finally went out of existence. It did not attempt to limit the working time beyond securing twenty-four

[1] Address 121 East 59th Street. This organization, formerly the German Housewives Society, dates back to 1895. Its annual report of 1919 shows: a membership of 198; annual membership fees of $6; an office maintained; 137 workers placed within the year; 227 persons calling for help; premiums given to employees for records in service, 31.

[2] Kellor, Frances A., *Out of Work*. 1915. Bulletin of Domestic Reform League, Woman's Educational and Industrial Union, Boston. Report of Commissioner of Licenses, New York.

hours' off every week, but hoped that eventually work could be reduced to a ten-hour basis.

From time to time other unions have been formed in different cities. In 1920 it was reported that ten unions affiliated with the American Federation of Labor existed in the following cities: Los Angeles and San Diego, California; Brunswick, Georgia; Chicago and Glencoe, Illinois; New Orleans, Louisiana; Beaver Valley, Pennsylvania; and Denison, Harrisburg, and Houston, Texas. At the same time it was reported that the Hotel and Restaurant Employees' Alliance and Bartenders' League had established domestic workers' unions in Mobile, Alabama, Fort Worth, Texas, Richmond, Virginia, and in Lawton and Tulsa, Oklahoma. But an inquiry in 1922 addressed to these unions failed to bring a response so that perhaps they were all shortlived.

The unionizing of domestic workers started earlier in Great Britain, and has been successful there partly because of the national unemployment insurance system, in which the domestic workers' union is an agency recognized by the government. Before the war, the domestic workers' organization had been extended from England into Scotland, and there was a national organization with various local branches. After the war the organization seems to have increased in strength. "The Domestic Workers Union of Great Britain—all Domestics who desire a compulsory character note, better conditions, shorter hours, must join this union," reads a pre-war official circular. Among the other purposes stated are: "To secure fair payment for services; to provide a weekly allowance for members in distress; to support financially members who may be involved in a dispute, with the sanction of the union." The union has also successfully given legal assistance to members in securing back wages.[1]

The union organization of women waitresses affords a parallel to what it seems possible that organization might accomplish

[1] See also, *Life and Labor*, Aug., 1912, for article on English Domestic Workers Union.

in the somewhat similar field of domestic employment. For example, in Chicago, waitresses in 1900 were working 12 to 14 hours a day under bad conditions and receiving only $5 a week. An organization was formed quietly and on a certain day they asked and secured an agreement granting a 6-day, 60-hour week with a standard wage of $8, and other concessions as to uniforms furnished by employer, bookings through union, breakage rules, etc. These agreements secured annually by the union in a limited number of Chicago restaurants set new general standards for years for the waitresses elsewhere in that city.[1]

While the unionizing of domestic workers may seem a heroic remedy to many employers, it is the judgment of those who have studied labor questions that on the whole it will tend toward improved conditions for the workers, and in the long run toward a better type of worker. To secure such benefits from it, employers themselves would also have to organize so that there could be conferences of representatives prepared to discuss working conditions and wages. If the organization of domestic workers tends to bring about the organization of their employers, it seems probable that the latter may take under consideration other domestic problems, and so we may secure what is very much needed, a professional organization of housekeepers who will come together and consider all types of problems in the domestic field.

Other organizations for houseworkers.—Organizations other than labor unions have been formed by and for domestic workers in many instances. The Young Women's Christian Association in various cities has had such organizations; for example, in Boston it has maintained a club for its own housekeeping workers, and a social club for domestic workers employed elsewhere in the city. At Vassar College a clubhouse for maids is maintained, financed in part by a special endowment, and an active social and educational program is carried on. The Home Club for Maids in New York was an ambitious

[1] United States Report on Women and Child Workers, 10, p. 186.

undertaking started about 1915 by employers who subscribed memberships for their own employees; other domestic workers could join. The organization maintained a clubhouse with parlors, lunch room, and sleeping accommodations for a number of women workers who might be out of employment. While the undertaking was given up after two years, it rendered a service which was greatly appreciated. Domestic workers in Los Angeles have a clubhouse of their own, maintained by an organization numbering several hundred young women, which operates along social lines. The New York Housewives Aid Society already referred to, instituted prizes and other means of encouraging permanency in service. A group of Swedish domestic workers in Brooklyn maintained for a number of years a benefit group, which provided allowances in times of sickness or unemployment. In Germany, there was before the war a great development of organizations for the benefit of household employees, many of them providing homes for aged servants, others having to do with the provision of recreation.

The serious drawback to all this special organization of houseworkers is that it emphasizes the separation of this industrial group. The social stigma on housework at present is such that in some communities the houseworker is not welcome in working girls' clubs, study classes, boarding houses, etc. This will be overcome as economic and social conditions in household service improve. Temporarily separate social organizations may be a necessity and if conducted on a high enough plane they may even help to overcome the common view that domestic work is menial; but the social life of this group of workers should be merged with that of other young women as soon as possible. The professional organization of domestic workers, whether in unions or some other form of organization, is an entirely different matter and it should be pushed by their own leaders, aided at first perhaps by socially minded well-wishers of this group of handicapped workers.

Education and domestic employment.—The education of

the employed houseworker is frequently mentioned as the one essential if household service is to be improved, and local experiments in this direction are being constantly undertaken, although no definite and permanent program of teaching has yet been achieved. The most successful efforts have been the special classes for household workers organized under the various "cooking schools," schools of housekeeping, domestic art technical institutes, Y. W. C. A.'s, etc., which have taught cookery and housekeeping in our larger cities since about 1875, and the recent instruction in the public schools [1] where, often at the request of a local woman's club, classes for household workers have occasionally been offered in after-school hours or in the evening. As soon as the vocational movement in homemaking is thoroughly organized, and particularly as soon as conditions in domestic employment improve, it would seem that classes for employed workers in the household trades of cooking, sewing, laundry work, etc., would be adequately provided in public vocational classes.

Miss Salmon pointed out twenty-five years ago that the first great need in this field is educational research, and the training of leaders rather than the attempt to provide trade training for the houseworker. As Dr. Rubinow says, "It is perfectly futile to place any hope in training schools for a vocation that remains socially undesirable." But both these conditions are in the way of being met.

The education of the housewife, as employer, has been frequently urged as of equal importance with the training of the employee, and now with the almost universal teaching of home economics in public schools, this training is guaranteed for the next generation of housekeepers. Such teaching will reach many prospective houseworkers also. Since the prospective worker, however, drops out of school at an early age, it will be necessary to institute direct vocational training in the household arts for young women who are entering this field. Such

[1] See, for example, Marsh, Helen E., "A School for Housemaids," *Journal of Home Economics*, 1915, pp. 435-437.

additional vocational training should also include a brief specialized management course for the employer, for the problems which outside industry is now recognizing as personnel management are at the heart of the domestic labor situation.

One interesting suggestion is that girls of high school age taking Home Economics in vocational high schools may occasionally prepare for a professionalized type of domestic service. A step in this direction is the occasional field work done by such students in private homes, for compensation, while still students in the school. In one Massachusetts vocational school the girls went out as Household Accommodators, helping individual housewives at twenty-five cents an hour, and one girl in the first year's class went permanently into housework. The Sargant School at Beacon, New York,[1] had from 1896 to 1910 an experimental class in preparation for domestic service. A successful training school for colored workers is reported in Washington, D. C.

The ethics of service.—A federal study of women criminals shows that an abnormal proportion come from domestic employment.[2] The mothers of illegitimate children come more from among the service industry than from any other industrial group.

This is due primarily to the industrial "selection" of women for service which brings to it among others the slightly deficient and those not competent for other employment; it is also doubtless due to the lack of social protection for the solitary worker in service. Supporting ethical standards reach the individual only through the social group with which he is in

[1] Arnold, Sarah Louise. *The Sargant Industrial School,* Beacon, New York, 1917. A department, the "School of Domestic Training," gave a 9 months' course for young women, 15 to 19 years of age, who lived in residence. At first, orphan girls were received from institutions but they found adjustments difficult; later, girls from the neighborhood were taken. The department "was closed largely from lack of girls of ability and character who cared to take the training. The type of girl who would make a good servant could always find employment and good wages without training."

[2] Relation between occupation and criminality of women. Vol. 15, U. S. Report on Women and Child Wage Earners. Summary in *Journal of Home Economics,* 1913, p. 224.

sympathetic contact. As Miss Abbott, Chief of the United States Children's Bureau, has said:[1] "People still talk about the protection which is given the girls in a good home as though they worked in no other kind and do not realize that very few women, however good their intent may be, find it possible to exercise the type of restraint upon the girl's behavior which her own social group, including her parents, are able to exercise over her."

The constructive need is for the development of a special professional ethics of employee and of employer that shall safeguard this occupation. Just as lawyer, and doctor, and nurse have their professional standards, so this vocation of household work because of its intimate personal contacts needs professional conventions and these will doubtless come as special training and organization appear in this field. The action of the Chicago Household Workers Union in "demanding" a light at the rear door, or the use of the front door, as a matter of personal protection, is a case in point.

Domestic service a world problem.—The war, which accelerated the broadening of industrial opportunities for women, has made necessary a leveling up of conditions in household employment if hired workers are to be secured for the home. A Canadian Government Committee on the Standardization of Domestic Service (1921)[2] in an international inquiry regarding conditions in domestic service in various countries found that domestic service is everywhere an unpopular occupation and is everywhere having attention. The report recommends that "a practical study of housework and housekeeping be made a part of the school curriculum for all girls, beginning preferably at the age of 10 to 12 so as to catch and hold interest early in life." The report also recommends instruction of employers, simplification of housework, standardized hours, and the standardization of housework itself.

[1] Letter of Nov. 27, 1921.
[2] *Monthly Labor Review*, June, 1921, p. 103.

The Government Labor Board of Stockholm, Sweden, reports the organization of houseworkers' unions in Sweden, also of a housewives' alliance with fifty branches all over the country. The unions are seeking definite hours of labor from 7 a. m. to 7 p. m. with extra pay for over time, and 14 days' holiday a year with pay. Other standards sought are municipal labor offices for household labor with exclusion of private agencies; training for servants; servants to be addressed as "Miss."

There is also reported the adoption in Switzerland of the official "directions" which reduce hours for domestic service and put the houseworker upon a new status.

The Woman's Advisory Committee on Domestic Service appointed by the Ministry of Reconstruction in Great Britain, reported in 1919 on plans for training household workers, on organization for the distribution of workers, on the equipment of the home, and on organization and conditions in employment. Pending the formation of local committees for working conditions, this general committee recommended a reduction in working hours, an allowance of time off of at least two hours daily in addition to time for meals, and a fortnight's annual holiday, and, for workers not living in the house, a 48-hour week.

In 1919 one of the local advisory committees representing the Mistresses' Association and the domestic section of the Workers' Union for Birmingham and Midland Counties took action as follows: A minimum wage was set for girls from fourteen to sixteen in training at seventy-five to ninety dollars a year; a minimum wage for girls from seventeen to twenty-four, $105 to $158, including an allowance of $12.65 for uniform. For servants over twenty-four years, the wage was to be agreed upon by mistress and maid. The working day was to extend from 6:30 a. m. to 10 p. m., or fifteen and a half hours with two and a half hours off for meals, and two hours off for leisure, making a net working day of eleven hours. One half-day per week, 3 p. m. to 10 p. m., was allowed off, and a

similar half-day on alternate Sundays with two weeks' holiday each year.[1]

In Germany the old oppressive laws regarding domestic service were questioned in the after-war period, and servants secured more liberal standards in a number of states and local districts. In Bavaria, for example, the government proclaimed a ten-hour workday for domestic employees, leaving details of working hours to mistresses and servants. In the Bavarian cities of Nuremberg-Fürth, the Union of Domestic Servants and the Housewives' League being unable to reach an agreement, the government made in June, 1919, an award applicable to these cities as follows: Service record books to be replaced by separate discharge certificates; notice must be given before the fifteenth of the month, to take effect on the first of the following month. After nine months' service, eight days' leave is allowed; after a year's service a longer leave must be given, and during leave servants are entitled to full wages and compensation for board. Hours of work must be between 6 a. m. and 8 p. m., making fourteen hours for the workday, with rest periods of four hours, including one-and-three-fourths hours free time in the afternoon, leaving a net working day of ten hours. On Sundays and holidays only the most necessary work shall be done and when spring cleaning is done, extra help must be hired unless the mistress helps. Opportunity must be given in the evening to attend night schools, lectures, theaters, etc. Juvenile servants must be home by 8 p. m.; adults by 12. Wednesday afternoon is to be free each week and a half-day on Sunday, and in addition a whole free Sunday each month in the summer months. Wages are fixed for beginners up to the age of eighteen, and with higher wages for eighteen to twenty, and for those over twenty. This Nuremburg-Fürth award caused great difficulty at first, but within two months, employers and employees had accepted the new order of things.[2]

[1] *Monthly Labor Review*, Feb., 1920, p. 130.
[2] *Ibid.*, pp. 131-132.

The new Austrian domestic service law (1920)[1] provides in effect for a 13-hour workday (for workers under 16 years, a 10-hour day) by specifying a 9-hour uninterrupted rest, as a rule between 9 p. m. and 6 a. m., with two hours for meals; in addition, there are to be eight hours off every other Sunday and four hours off one week day each week; one to three weeks' vacation with pay; in sickness, free medical care; wages paid monthly and if board is not furnished, then board money allowed fortnightly in advance.

Summary on household operation.—The operation of the household or the work of housekeeping has been examined in the last three chapters in terms of the problem of housework, its quantity and its organization for economy of effort and time; the parts played by equipment, and by labor, whether rendered by the housewife or by her employee, have been considered; and also the possibilities of using mechanical equipment within the house and special service companies from without. What will be the outcome of adjustments now under way is not plain, but there seems to be evidence that the work of the household will be organized and reduced to an 8-hour basis and that as material services decrease the personal life of the family group will expand and make larger demands upon the housemother's time. This personal division of household activities is considered in the next chapter.

[1] *Monthly Labor Review*, June, 1920, p. 191.

CHAPTER XV

PERSONAL OR ADVANCEMENT EXPENDITURES

Personal or advancement items in the budget.—The family budget has been traditionally divided into expenditures for the material needs of food, clothing, housing, and household operation, and in addition a fifth item, which has included allowances for the personal life of the family group and for family progress, and also often for savings, which last we have agreed to make a separate budget item. Early students of the budget used the term "sundries," for this fifth division, but this is too indefinite to be serviceable. Mrs. Richards used the term "the higher life" of the home, and this phrase rather accurately describes the items having to do with the personal and social satisfactions of life as contrasted with the material necessities of food, clothing, and shelter; but the term "higher life" is objectionable, possibly through its religious significance. The terms "advancement expenditures" and "personal expenditures" have also been used, and these are perhaps as good commonplace terms as we have.

Classifying items which come under expenditures for advancement, one would list the following: Educational expenditures, using the term to include not only school fees, but also books, magazines, and all reading material for the home; vocational expenditures, as labor organizations, professional expenses, etc.; health expenditures, including fees to doctor, dentist, and other specialists, nursing, medicines, and related charges; recreation, including the theater, music, vacation trips and similar outgoes; church and philanthropy, to include all contributions to religious, social, and similar enterprises;

civic and political expenditures, including contributions to political and patriotic clubs, and the like; gifts, to include those to members of the family or to outsiders; and, betterment expenditures, such as new furniture, etc.; these last are a kind of savings and may better be transferred to that item. In making an actual classification of items of expense one would place an item here or there, according to its purpose; travel, for example, might be an expenditure for education or for health or for recreation, and in using a budget it should be assigned accordingly. A book might be very definitely an educational expenditure, or, if it happens to be a First Aid Handbook, it might be quite as definitely a health expenditure.

Even a minimum income makes some provision for this type of expenditure, and as income increases these items steadily expand in variety and importance, commanding an ever-increasing share of the income. Personal expenditures become a measure of standard of living attained. The steadily growing "sundries" item of the workingman's budget studies includes these advancement or personal expenditures, but also the smaller items in housekeping expenses (excepting fuel and light). Personal and advancement expenses (excluding savings and housekeeping expenses) should command a minimum of perhaps 12 percent in minimum budgets, of 16 percent in comfort budgets, of 18 to 20 percent in moderate budgets and 25 percent in liberal standards.

Among personal expenditures those for health have the insistence of physical necessities, but others are matters of personal preference, so that Ellen H. Richards called this the "Region of Choice" in the budget.

In this choosing as actively participated in by all members of the family, as well as in the activities themselves, reside great possibilities for developing the personal resources of the family as Mrs. Abel has pointed out.[1] Here there are presented only a few selected topics in this field as indicating the underlying considerations of choice and cost.

[1] Abel, M. H. *"Successful Family Life,"* chap. 19.

The personal expenditures of a family.—It may be helpful in considering the range of advancement expenditures to present a plan for a typical family composed, let us say, of a father and a mother, a daughter of sixteen in high school, and a boy of ten in the fifth grade. The father, we may assume, is a member of a commercial or other professional club in connection with which he will have certain opportunities for social life. His political and civic responsibilities may lead him into a civic organization where he will make certain social contacts as well. In many communities he will have an opportunity for outdoor life through a country-club organization. While his commercial and civic clubs may or may not provide wider social contacts, his country club is almost sure to be a matter of interest to all members of his family as well as to himself, so that the mother and the children will be found occasionally at the clubhouse. In some communities, indeed, the country club is frankly a family club, where there are parallel activities for adults and for young people. The man may also find interesting social contacts through his church. Fraternal organizations may make their appeal, also, to this man.

There are certain other calls upon the advancement budget of the family which will be a matter of special concern to the man of the family. The allowance for insurance and investments, discussed elsewhere, should have his special thought. He may take an active interest in some outside recreative social activities, such as the opera, theater, or music, although one thinks of these primarily as the interest of the woman of the family. He may cast a deciding vote for certain magazines and for part, at least, of the new books bought by the family. He may well have some special hobby that engages part of his own time; it may be a handicraft—and if so he will make points of contact with his son through his interest in tools and a home workshop. It may be a fad of collecting, and that may appeal as well to some other member of the family. Or his may be an interest that leads him to make personal

associations with some community club, as in music, art, walking, or any other of the hundred avocational fancies that the human mind is heir to.

The mother we think of as the personal leader of the family group through the fact that it is she who has the time and the opportunity to share in and help cultivate the interests of each of the others. In addition, however, she should strike out for herself into fields of interest that especially appeal to her. There are, of course, her personal relationships to her own work in the home as housekeeper and homemaker, and here she will make contacts, let us hope, with other professionally minded women of the community. She should develop at home her professional equipment of special books, magazines, pamphlets, records, and the like; and she may meet with like-minded women in study classes or in a voluntary club devoted to a professional consideration of home problems of all types, material and physical but no less personal and ethical. She is responsible for her own intellectual life as well as her own immediate household tasks. She should have social and recreational relations of the sort suggested for her husband, and in them she should make contacts of a double sort, some for herself independently as an individual, and others for her whole family household. The woman who belongs to a literary club, for example, in which at stated intervals a group of home women forget husband and children and read together for pure enjoyment Shakespeare or Browning or other good literature, has a resource that is not to be discounted. The home woman is often a member of a social service organization in which she may as officer or worker render help in the community. The church also brings her many opportunities of this sort. If she is a college graduate, she may find interests in her local alumnæ club. She needs to look well, also, to some opportunity for physical recreation, as in walking or motoring. Upon the woman will come the prime responsibility for planning the general recreational activities of the family both at home and outside in theater, music, and the like, and as

regards the magazines and other reading material that come into the house. She it is who must plan the life of the home so that it will be rich and wholesome and satisfactory to all its members.

A girl of sixteen, whom we may think of as in high school, will have outside interests in music lessons, probably, and in a dancing class, with some form of recreative organization such as the Girl Scouts or possibly one of the social clubs which are commonly a part of secondary school activities. The question of a high school sorority will probably have been passed upon by the school authorities. While the general tendency seems to be against secret organizations for high school students, there is an evident movement toward a richer program of outside school activities to be carried on under the general supervision of the school authorities. Parents need to watch this program, and to cooperate actively with the school authorities. Standards as to social parties, for example, can be set when home and school are in agreement through such organizations as the Parent-Teacher Association. The home will need particularly to guide the sixteen-year-old daughter in her recreations, her reading, her contacts with life interests of all kinds. She will make contacts with theater and concerts, but as a member of the family group. She will be broadening her knowledge of life not alone through reading in the school, but through magazines and books at home and conversation within the family group where fundamental points of view can be discussed with frankness and vigor, so that ethical standards are steadily developed and strengthened. In magazines this is the time for her when the transition is being made from those which are read by children to those with the adult point of view. Interests are already running on toward college and a career, and, half-consciously, toward a home of one's own; and the mother and father alike have now a responsibility for guidance that calls for judgment and sympathy and common sense. The church, with its program of modern religious education dealing with problems of personal

standards, vocational service, and community relationships from the ethical point of view, can make now its great contribution, so that in the next few years this young woman-to-be will pass from the point of view of one to whom the church and the home and the school are to render service to that of one ready to serve in all of life's relationships. The father and mother as personal ambassadors to youth have in these years between their great opportunity.

The boy of ten with his school program has interests in history and geography and literature. He must also be served by the home in the way of creative activities with tools of various kinds, games, and contraptions suited to his "gang" and all the other interests dear to the heart of boydom. This is the time when a strange structure appears at the rear of the lot and we know that the boy is playing Indian with his mates or cooking an outdoor dinner as he plans ahead for the summer camp. Or we see a dozen boys practicing for the circus and later the ticket-taker at the front gate collecting pins or buttons from the juvenile spectators who stream in. There must be magazines like *St. Nicholas* and the *Youth's Companion,* and books like the *American Boys Handy Book* to feed the ceaseless fire of interests and activities that burn in his mind. There must be the work-bench with tools for woodwork, and, if possible, for simple work in metals, and all sorts of materials provided so that he may build the house and make the boat or whatever else catches his fancy. He must have athletic outfits for hikes and other Scout or sub-Scout activities. He should be led to systematize his preparations and do well whatever he undertakes, not, of course, spoiling the enthusiasm of spontaneous play with too formal arrangements, but rather learning to play hard, and to play expertly and to provide for himself in full measure all that is necessary. The boy who makes for himself a dog tent, and waterproofs it, has probably taken on a general benefit as well as acquired a specific bit of equipment that he will enjoy using. The modern school of religious education in the church

will have something definite for this ten-year-old boy; he will learn to value decent and courageous manhood and will be setting a pattern for himself.

In some such way each member of the family will give expression to the personal and social nature and the family budget will make provision for the needs of each. In no one individual of course will all of the activities suggested find expression. We will choose and select as each of us finds it satisfactory to do. In smaller-income families there will be more dependence upon community contributions in recreation, music, and the like and upon organizations such as the church and the lodge, and less upon budget expenditures, for the personal life. To every one it is possible, however, to find the makings of a wholesome, well-rounded life. It is the responsibility of the family group to see that each individual gets what is best for him and especially to see that he brings from distant fields of individual interest a contribution to the common life of the family, thus making home a focus for individual interests and a place of exchange of personal experience and hence of unceasing personal satisfactions. Sound family life always has been just that, and our survey of the tendencies in American life leads us to believe that the family of the future promises to render even greater service of this personal sort to its members. Results of this sort come not by haphazard, but by choice and direction, and to this goal the American woman of the future must address herself.

The round of life.—One can get an approach to the quality of life achieved in any home by observing the usual round of happenings from day to day, week in and week out, the year around. Without urging any formal budget of time, as has occasionally been urged, one might suggest that some attention be given to the happenings in the experience of life. Our fathers organized family life in a more rigid way than do we, with their daily religious observances and formal gatherings at table.

The modern city family can set as its goal at least one meal

together and an occasional evening together in the living room, and happy the city family which can still breakfast together, as well as join one another for dinner. These rarer opportunities are to be improved. Table talk not too formal, but reporting with zest of the affairs of the day, is worth while for young and old alike. The occasional evening together may mean sometimes music or reading aloud or silent reading, with just the feeling that "we are all here."

The weekly program should include one or more outstanding events in which the family participate. During the week there may be an informal dinner-party or an evening out, in which members of the family sometimes enjoy their recreation together. Every week perhaps there will be some solid reading by one or more members of the family, and a contribution from it to the talk of the group. There will be parties, outings of various kinds, in which individual members take part and bring, at least, a contribution of high spirits back to the family group.

Every week brings its Sunday. This should be the great day, the different day, in the home, since it affords opportunity for many activities in common. In addition to family attendance at church and other opportunities for moral uplift, there are many special things which receive attention on this day in a well-organized home. It affords opportunities for walks and other simple family outings which do not interfere with the spirit of the day. A tendency toward commercial recreation cuts across the best possibility of what, as the old song has it, "comes between a Saturday and a Monday." Sunday should provide some opportunity for personal freedom and for quiet and physical rest. It is a time for occasional hospitality toward relatives and close personal friends, but a poor day for formal entertaining. Occasionally at least to get into the open and back to nature is a tonic which Sunday may make possible. To blend this day into the other days of the week by keeping up the regular routine makes a family lose its great possibilities. The meal hours should not be greatly different from

those of other days; but all housework should be eliminated as far as possible and many families have a practice of making preparation on Saturday so that the mother on Sunday has almost as much freedom as the other members of the home. It is a time for reading, for music, for correspondence, for easy talk, and for other interests which we have small opportunity to cultivate during the week.

In the year's round there will be outstanding events in the family's experience, such as birthday parties, anniversaries, holiday celebrations, family reunions and other festival occasions to which all will be looking forward and which will leave pleasant recollections long after. Where there are children, few months need pass without an occasion of this kind—sometimes celebrated by the family group alone, sometimes participated in by younger or older friends who come in. There is always the summer vacation and always the mid-winter holidays to look forward to and make plans for.

Household equipment reveals the personal life.—The very equipment of the home is another measure of the quality of life which a family secures, and items of furnishing and equipment give clues to the usual activities of its members. William Morris has somewhere given us a description of a living room with its solid substantial table, its easy chairs, its reading lamp, and its rugs, and his description is an index of the social life to which such a room contributes. If one were to list the material things which in the household minister to the personal life, one would include the books, magazines, and other reading material at hand; musical instruments of one kind and another; the outfit for sports, games, and outings; property which is the children's own, including toys and games —but no less tools and working equipment of various kinds so that an active boy may find in his own home an introduction to a half-dozen trades and a real training in resourcefulness as he renders some simple service in household tinkering and repairs. The outfit for the girl may include provision for a playhouse, art-work, sewing, and handicrafts of various kinds.

The artistic decorations of the house, pictures, rugs, and hangings contribute a refining influence which cannot be spared; flowers within doors and without, and pets, where there are children, have a formative influence the value of which is not easily estimated. It is such items in the household environment which contribute to the quality of personal life which a given family achieves, and make it fair to say that household furnishings and equipment are an approximate index, even if not a complete measure, of the life lived.

The home grounds.—Like the furnishings of the home, the outside grounds become a great source of pleasure in the common life of the family group. Housing reformers seem sometimes divided in their opinion as to whether the low-income family has enough interest in its home grounds to justify their preservation. There is, however, a great possibility of making these grounds a source of satisfaction for the family if only there be given through our schools or in other ways sufficient stimulus toward their development. The moderate-income family quite naturally finds time and money for the proper care and development of lawn, flower beds, and the like; and there are evidences that even those who seem to take no thought for what has been called the beautification of the home grounds respond readily to any stimulus from the community group. One has only to look to Japan for an interesting illustration of the use of the home grounds as a source of pleasure, as indicated by the following statement:

"Japanese gardens, laid out about the elaborate or simple homes, represent hills, rocks, islands, valleys, trees, and shrubs in narrow compass—a miniature world thrown around the dwelling, which represents symbolically and allegorically the world of nature. Mounds of earth represent hills, in fore and rear positions and valleys between; the boundary stone, the worshipping stone, the winding path of rough stepping stones following a pleasing sinuous curve instead of a geometric right line—the arched stone or timber bridge over the stream—each represents distinction rather than the commonplace, provides

enjoyment in the consciousness of surroundings, replaces indifference with interest. The tree at the workingman's door, whose form the workingman's hand as well as nature has shaped, the winding path of stepping stones from the door to the street, the single stone of curious form in the yard testify provision for enjoyment in one's surroundings."

Reading in the home—magazines.—Magazines are a large part of the reading matter in American homes but we have no current technique for selecting and for using magazines as we have for selecting one's diet or wardrobe. The periodical character of the magazine,—its weekly, monthly, or quarterly appearance—conditions its value and its use; it is forever old, the same magazine month after month with the same general contents and qualities and policies; but it is likewise forever new, with each issue presenting new articles and new writers. Like a friend who travels abroad and returns to us with stories of his experience by the way, it brings its regular budget of varying news, comment, story, humor, what not, yet all modified by the individual quality of the particular magazine concerned.

One who knows his magazines could almost identify them from their tables of contents. What types of magazines have we? They may be classified first as to the period of issue; the more or less solid monthlies; the very solid quarterlies—of which America has but few—and the weeklies that in large part are organs of comment upon the news of the day only somewhat more balanced and more reflective in their reporting than the daily press can take time to be.

Magazines—or the parts of some magazines—may be classified as to the emphasis in their contents; some give news or report the world's events; some furnish news criticism or editorial comment upon current happenings; some are "literary" or interested in verbal style and distinctive expression of ideas; some are vocational or professional and deal with some one of the hundred special callings; while others emphasize one or more of the broad interests of life such as religion, art, music,

business, politics and government, the home, child life, health, and economic and social reform—these last likely to be either radical or conservative. Magazines may also be classified according to the age of the reader, as for the child, the adolescent boy or girl, the adult; and sometimes according to the sex of the reader—as for the girl, the boy, the man, or the woman.

It is amazing how uncritical and lacking in reflection is the attitude of the average person to the magazine he reads; his choice of a magazine has often been inherited like his politics. Or, again, if he has made a choice himself he has not realized that there are fundamental differences between a weekly like the *Outlook* and one like the *Literary Digest,* or between monthlies such as the *American,* the *Atlantic,* the *World's Work.*

In selecting magazines for a family that can spend say $25 a year on such reading, one would choose, first of all, a magazine of the general type that would appeal to all members of the family, perhaps one of the solid monthlies that carry stories and verse of high literary quality and have also articles of comment on large national or international issues. Next, one might choose magazines that more particularly meet the needs of each individual of the family group, a household magazine for the mother, a magazine with a business or professional cast for the father, and special magazines for the little child and for the older children. Then a family may have a magazine of special interest expressed in a subscription for a year—perhaps this year a humorous weekly, and next year a journal of outdoor sports, or of music, of travel, or art. The religious paper which has an honorable history from times when popular magazines were less common still has an important place in many homes.

Whether one shall pursue a policy of keeping to the same magazines year after year, and with good magazines much can be said in favor of such a program, or whether one shall change magazines from time to time, will be answered differently,

but the advantage seems to lie with occasional changes, at least, within the range of good magazines. A new magazine may be like a trip to a new country, for travel and wide reading are alike broadening, and though one may be glad to get back home again to well-tried friends by subscribing sooner or later to the magazines one has always liked, yet probably one has been keeping in touch with them all the time at the magazine table in the public library.

The magazines to choose from.—It would be impossible here to list even a completely typical selection of the different kinds of magazines, much less give any comprehensive view of the 22,000-odd daily, weekly, and monthly publications of America; but it will be helpful to mention and briefly characterize a few as typical of others.

The *Atlantic Monthly* is our American magazine of traditional literary distinction; its contents include essays, short stories, letters, personal experiences, poetry, and a discussion of current problems of large importance in the fields of religion, economics and politics. It carries just now a group of articles called, "The New World," treating political and economic issues; it has no illustrations save those which appreciative readers create for themselves, and all is done in English to the Queen's most exquisite taste.

Harper's, Scribner's and the *Century,* like the *Atlantic* in contents and literary quality, give relatively less attention to belles lettres as such and are a bit more worldly as it were. They all have illustrations that add richly to the text.

The *World's Work* is a magazine of events, of larger problems in business and in government, with broad-gauge editorial comment on men and measures, and fine illustrations—a magazine for the business man and citizen of broader vision that reflects wholesomely progressive American tendencies.

The *Review of Reviews,* as its name indicates, is a summary of articles in the world's leading magazines; therefore it affords a survey of the world's politics, government, business, and trade; it carries a selection of the best cartoons. It has in

addition its own original articles by leading writers, with comment by the editor, Dr. Albert Shaw.

The *American Magazine* appeals broadly to the great middle-class of thoughtful men and women. Stressing human achievement by personal experience stories, it stimulates like success. It is well illustrated, and it is a great national advertising medium.

There are fiction magazines that specialize in short stories, such as the *Red Book;* magazines of travel, such as the *National Geographic* and *Asia,* with illustrations and accompanying texts that are doing much to give Americans the cosmopolitan mind; there are magazines of the arts such as the *International Studio,* and of music such as the *Etude;* monthlies of the open country, as *Country Life* and *House and Garden;* and magazines that beguile the modern city-dweller to sports under the open sky as do *Forest and Stream,* and the *Outing.*

There are many monthlies for the household (some one hundred or more are listed), and they usually combine stories both "short" and "continued" with discussions of dress and food, of housekeeping and child care. Here may be mentioned the *Ladies Home Journal, Delineator, Good Housekeeping, Woman's Home Companion, Pictorial Review, Modern Priscilla, McCall's,* and the *Farmer's Wife,* as typical of slightly different approaches to this field. The *Journal of Home Economics* occupies a unique position of authority in this field.

There is the great number of specialized scientific publications: first, the weekly *Science* with its contents covering all fields of research; and then the specialized periodical, such as—in social science—the *American Journal of Sociology;* in religion, the *Journal of Religious Educations;* in economics, the *American Economic Review;* in education, the *Educational Review* and *School and Society;* and similar authentic reporters of scientific progress are to be found in all fields. As our higher education comes really to kindle living interests, one may anticipate that such journals will find permanent readers here and there in the homes of educated people, who will take

pleasure as an intellectual avocation in following the development of some scientific field. A chemist who, as a rational holiday, visited a university school of education recently to hear lectures and get in touch with the latest scientific progress in the field so as better to help on his local school board, illustrates this wholesome broadening of interests into a specialized field other than one's own.

Of quarterlies America has but few. Among them are the dignified *Yale Review* and the *International Journal of Ethics* with solid discussions on a variety of important topics; and the socially alert *Annals of the American Academy of Political and Social Science* which with each issue presents a survey by experts of some large economic or social or political problem that happens to be of present pressing interest to the country at large.

In the weekly field the *Outlook*, "an illustrated weekly of current life," and the *Independent* have long existed as unique weeklies that stress selected news features with a department of vigorous editorial comment, and with occasional stories, verse, and book reviews. These two are among the oldest of our weeklies with a personality; for in the *Outlook*, for example, one pictures the late Lyman Abbott and men of like mind as selecting the news of the week and commenting upon it. Both magazines have been marked by a high ethical or moral purpose, going back to their origin as religious papers; both have been tolerant, not partisan, in politics, and vigorously patriotic; and both interested in international developments as well. The *Independent* as recently reorganized has distinction in its "unprejudiced good-humored praise or censure of men and measures."

There are several other weeklies to be mentioned in this group: The *Nation*, once a journal of general criticism of the super-intellectual order, represents the "forward-lookers" in economics and political thought; the *Freeman* and the *New Republic* have much the same progressive point of view, the three varying in "radical" quality and in programs urged, and each having its following; the *Weekly Review* was established

on a basis frankly conservative as to political and economic institutions, holding fast to the good which the past has given us rather than straining for the future good of a new order; after a time it combined with the *Independent*, the latter passing eventually to its present form. All of these weekly journals of opinion and social criticism are vigorous and speak in loud tones, shouting their doctrines in troubled times when a shout alone seems to get attention. One sympathizes with the person who found it impossible to read any one of them continuously but by buying them in a chance order at the news stand found them individually excellent antidotes for each other and, combined, a rare diet.

Two weekly reviews of periodical literature should be mentioned: the *Literary Digest* and the *Living Age*—the former summarizing the daily press of the world and to some extent the magazines, and providing a world survey that appeals to the busy business and professional man; the latter reprinting in whole or in part articles from the leading reviews and magazines of all nations.

The *Scientific American* is our chronicle of technical progress for the popular and technical reader seeking general rather than specialized news. To a boy beginning to manifest interest in mechanics, engineering, construction, and the like there is no better companion, though its appeal is primarily to the seriously minded adult.

The *Survey Magazine*, a "Journal of Constructive Philanthropy," and its illustrated monthly edition the *Survey Graphic* merit a wider popular reading. It is constantly securing a wider use by all persons who have had training in economics and social science. Its interests include: industry, civics, health, social legislation, education, family welfare, recreation, and welfare agencies of all kinds. There is no publication like it for developing constructive interest in practical progressive measures.

The most popular weekly in America to-day is the *Saturday Evening Post*, with its entertaining combination of literary

fiction and business stories, its articles on trade and industry, and its editorial comment from the business man's point of view. It is rather fully illustrated and even its advertisements are an outstanding feature of interest, for it is the national advertising medium *par excellence.*

Children's magazines merit careful selection. The weekly *Youth's Companion* (Boston)—oldest of juvenile publications—with its stories of adventure, travel, and experience, its practical articles on how to do things, its attention to the special interests of boys and of girls, its news notes and editorial comment, leaves little to be desired. It appeals to old as well as young and succeeds in being "a family paper." The monthly *St. Nicholas* (New York), more distinctly juvenile, is of equally high quality. *John Martin's Book* (New York) is a child's magazine of high quality with "things to do," and attractive contents for children three to ten years of age. *Our Little Folks* (Salem, Massachusetts) is a magazine for children not yet able to read, or just learning to read; *Boys' Life* is the organ of the Boy Scouts Movement; and the *American Girl* of the Girl Scout Movement; and *Every Girl* similarly of the Camp Fire Girls. *The American Boy* (Detroit) is an independent publication of merit. *Current Events* is a little weekly newspaper for children which has attained a wide use both in school and outside.

There is also the newspaper world to take into account. The local newspaper, weekly or daily, for the town dweller, the weekly from the county seat, and the daily from the nearest city—if one is on the farm—is a *sine qua non* in any one's reading; to be part of one's own community is as important in its place as to meet family responsibilities. The great city daily should also be read in every home that can afford it—it is significant how the New York *Times, Tribune, World,* Chicago *Tribune,* Kansas City *Star,* and similar dailies reach out over large sections of the land and have some readers even in the smallest places and thus help to inform all society. The book reviews and literary sections of some dailies, for

example, the New York *Evening Post,* are of high quality. There is a kind of daily paper of large headlines and large type, many illustrations and cartoons, that is much criticized in some quarters but secures a larger circulation than any other type of newspaper. Its circulation is of course among the relatively unlettered. Its success should lead some wealthy well-wisher of society to give for the same great group of readers a paper of the same popular appeal, and having a socially constructive attitude toward politics, business, education, international relations, and other fundamental issues that determine the lot of the average man.

Money for magazines.—The 1914 census shows that the 22,754 American newspapers and periodicals have an aggregate circulation of 205,594,907; of the circulation 33 percent is in the field of news, politics, and family reading; 18 percent in general literature; 16 percent in religious periodicals; 8.8 percent in agricultural periodicals; 6.8 percent in "society, art, music, fashions, etc."; and 4.3 percent in trade magazines. The aggregate value of subscriptions and sales is $163,577,090, or $1.66 per capita of population.

Magazines are purchased, of course, either number by number at a news-stand, or more commonly by the yearly subscription. The latter may be secured either on the initiative of the subscriber, or through a subscription canvasser, or as a gift. Despite the low esteem in which book and subscription canvassers are often held, they serve society as does the teacher or preacher by bringing to us what we should have and enjoy having, and the representative of reputable magazines is really a servant of high values. Two methods of magazine economy should be cited, the "club" rate for subscriptions to two or more different magazines sent at one time through agencies specializing in this kind of service, and the cooperative magazine-exchange club, the members of which subscribe to one or more magazines each and then exchange them in regular routine after reading. A neighborhood club of this sort either with or without occasional meet-

ings for discussion will stimulate many families to do extra reading and provide them desirable materials. At least one magazine agency specializes in deferred subscriptions at considerably reduced rates, making delivery a few weeks later than the usual date of publication.

A recent study of reading matter in Nebraska farm homes [1] revealed the following facts: Periodicals reach nearly all farms studied; farm papers and newspapers furnish most of the reading matter; the average country home received 33 copies of periodicals per month, or a daily paper in practically every home, a little better than one weekly in every other farm home, and three out of four homes taking a monthly. Women's magazines reached between a fourth and a fifth of the homes; family or general magazines a sixth; but children's magazines less than one home in thirty-three of those included in this study.

Home libraries.—The home library should include books one wants to own and use again and again. Transient fiction which one reads but once may better be passed on as gifts or permanent loans. But books of permanent worth—biography, history, letters, drama, poetry, travel, and books relating to the vocational interests of the man and the home interests of the woman, outstanding fiction, and reference books of all kinds, should be owned and turned to again and again if the stream of intellectual life is to run strong and clear.

Home libraries are often hereditary estates, representing in part collecting of books by the earlier generation, as well as present-day purchases. Often these inherited collections contain valuable volumes which one should keep permanently as well as books that may better be weeded out. What shall be the policy of book accessions in the home library?

With the "Buy a book a week" slogan we have recently been urged to buy books as regularly as we receive a pay envelope and if this is too strong medicine for small income

[1] Rankin, J. O. *Reading Matter in Nebraska Farm Homes.* Bul. of University of Nebraska.

families they will find that buying one book a month or at least several books a year is a not impossible ideal.

Shall we then buy and own books, adding regularly to our collections? Books are heavy to transport, and in this era of moving about and of rented homes, books, except very precious ones, may seem heavy luggage. There are certain books which are essential to possess. Each of us has his chosen books which to him seem of most worth, and these, together with reference books, the dictionary, an atlas, an encyclopedia, the professional books for the man and for the woman—these should be among the first acquisitions of a new home. Books indeed are likely to be among the dowry which both members of the household bring to it.

People are rather helpless about getting good books into the home. The librarian should be asked for advice on reference and other standard books. Children should be encouraged by parents to develop collections of books of their own and then to use them.

Public libraries.—The family should use the public library liberally for books that it does not possess, yet librarians estimate that not over one person in five in our cities use the public libraries. A recent Nebraska study shows that one farm family in twenty uses library books.[1] There are estimated to be over 18,000 public libraries; in addition there are school libraries, and the extension of library facilities by loan libraries and by wagon and truck. The last return of the United States Bureau of Education (1913) shows that 13,686 of these libraries contained 89,763,884 books distributed as follows:

SIZE OF LIBRARY	NO. OF LIBRARIES	NO. OF BOOKS
300–1,000 books	5,384	2,961,007
1,000–5,000 "	5,453	11,689,942
Over 5,000 "	2,849	75,112,935
Totals	13,686	89,763,884

[1] *Reading Matter in Nebraska Farm Homes.* University of Nebraska.

Music in the home.—Like other arts, music is often left to the professional and is too little utilized by the average person or family as a daily source of pleasure. Pleasure from an art can arise in two ways, either through a lively appreciation of the art as practiced by others, or through an active experience of creation and self-expression in the art. Music can be the most general of the popular arts, since no barriers of cost make its enjoyment impossible and we all have ears to hear and voices to sing. Recently community singing has brought the pleasure of musical expression to individuals who had never sung before, and there is evidence that family groups are singing more than formerly.

The player-piano, which provides an opportunity for contributing skill on the part of the player, and the phonograph, which entirely mechanizes musical production, are new and powerful factors in providing instrumental music in the home. They have great possibilities, moreover, for training in musical appreciation—it not rarely occurs that a phonograph leads a family unconsciously to prefer classical music to rag-time. The phonograph is aiding persons with no particular musical education to appreciate music in new ways—to hear out the sound structure or the design of music, to think out musical themes, and to build up mental imagery in connection with music, and perhaps to act it out in dramatic ways. Explanatory comment upon phonograph records [1] has greatly enriched the worth of mechanical music.

It would be a pity if the phonograph were to permanently debar Americans from learning to play musical instruments. It may indeed lead to more musical performance if family leadership is provided in that direction. The father of a large family who taught each child to play a separate instrument and organized a family orchestra will remain an exception; but the lesson is plain that the playing of different instruments by members of the family can be made a source

[1] See lists published by phonograph companies; also list prepared by Louis Mohler in Farnsworth's *How to Study Music*. Macmillan, 1920, pp. 277-294; also *Music Appreciation for Little Children*, Victor Talking Machine Company

of pleasure to the family and to others as well. And in any such playing, while the ideal of skill in the performance is important, it is more important to give pleasure through music; then skill will be sought successfully. The piano accompanist who can and will sit down and play the old songs for informal singing of a family or larger social group may give more pleasure than the professional, because she is making possible to many the joy of musical production.

Household music thrives upon occasions that call for special celebration, as holidays and birthdays—gatherings large or small of the family itself, which we are learning to prize; for, as one busy man when asked to join another welfare organization said: "Can't do it, I am starting an association of my own family and trying to have a meeting at least once a week." The Sunday afternoon or evening at home gives music its opportunity. The pleasure of being together may lead naturally to its expression in music and singing, or playing together will add to the pleasure.

The home has a responsibility for starting the child upon its musical development, which should begin as early as the child learns to speak. Music and speech best develop in parallel lines, as the child gains increasing control of the vocal cords in the pre-school period; so, singing can be learned, as talking is learned, more or less unconsciously by imitation and participation in the life of the home. The basis for skill with instrumental music can be laid in the same period.

One family can often lead in music for a neighborhood by getting the children together, or the children and adults, for occasion "sings." The neighborhood orchestra contributes pleasure to its members and, on occasion, to a wider audience in church or club. The community chorus or informal "sing" is furnishing music nowadays that is available at small or no cost, and that brings the pleasure which comes from the larger group singing together. The family group can go together and it will take back home a stimulus for more home music.

Looked upon as an item in the budget, music in the home may call for the provision of musical instruments, the piano and the phonograph, or one of them at least. If a piano, an instrument with a player attachment is to be preferred, so that everyone may use it. Records both of classical and popular character should be provided in ample supply, the latter for the novelty pleasure they give, the former as permanent and increasing sources of satisfaction. Other instruments should be added as far as the young people can be interested —even a mouth organ has its justification with children and the boy who will learn the banjo has an accomplishment affording life-long pleasure. Of music books, both instrumental and vocal, there should be a variety, and also a quantity supply of certain collections desirable for group singing,[1] which is often appreciated in informal entertaining.

Equipment for music is an investment in permanent property, and the family should, if necessary, stretch the purse to meet the needs here. For this reason an installment purchase of a piano may not be open to the usual objections to installment buying. The budget should also provide for an occasional concert or opera, if available. Expenditures for the special musical training of children are often incurred, almost always gladly even when at a sacrifice, but not always wisely. The home and public schools should give every child its musical heritage of the opportunity to sing and take part in chorus singing; church choir, singing clubs, and local orchestra may give additional opportunity to those of moderate ability; outstanding ability alone warrants specialized training involving large expenditure, and such ability is a matter

[1] Professor Farnsworth has suggested for children's singing: *Twice 55 Community Songs,* C. C. Birchard & Co.; H. C. Cartwright, *Song Treasury,* Macmillan; C. H. Farnsworth, *Grammar School Songs,* Scribner's; Farnsworth and Sharp, *Folk Songs, Chanteys and Singing Games,* H. G. Gray; W. H. Hadow, *Songs of the British Isles,* Novello; Marie Ruef Hofer, *The Children's Messiah,* Clayton F. Summy; *Community Christmas Carols,* W. H. Gray Co.; *Ten Traditional Carols for Christmas,* Chas. E. Ditson; H. Augustine Smith, *Hymnal for American Youth,* The Century Co.; Smith, Farnsworth, Fullerton, *The Children's Hymnal,* American Book Co.

of native endowment, the presence of which can be determined by tests in advance.

Cost and value of an education.—The United States Bureau of Education estimated for 1918 the per student per annum costs of education to be as follows: Public elementary schools (including kindergarten), $31.68; Public high schools, $84.59; Private elementary schools (including kindergarten), $36.57; Private high schools, $214.34; Public universities and colleges, $505.95; Private universities and colleges, $291.31. These costs are of course taxation or institutional costs of providing an education, not the costs as borne by the family or personal budget of the individual securing an education. There have been several budgetary studies of the cost of a college education at Yale, Smith, Teachers College, University of Illinois, and elsewhere. These are best made when students keep personal accounts of expenses, which are then turned in for analysis. There is a benefit in keeping such records, and several colleges are now giving supervision to the keeping of students' personal accounts and are allowing college credit for it. There is a similar tendency in high schools and indeed elementary schools. One result of such study is to give the student a keen appreciation of what education costs as an item in the family budget.

The value of an education can be shown inferentially thus: Chancellor Smith showed among the 8000 Americans (1899-90) who achieved sufficient distinction to be included in *Who's Who,* 31 were from the group of five million uneducated Americans; 808 were from the thirty-three millions who had a common school education; 1245 were of the two million high school graduates; and 5768 were of the million college graduates. The Massachusetts Commission on Industrial Education (1906) showed that boys who left school at 14 started at $200 a year and received $650 a year when 25 years old, while technically trained students leaving school at 18 started at a salary of $625 and at 25 years of age received $1550.[1]

[1] Quoted by Ellis, A. Caswell, *The Money Value of an Education.* U. S.

Cost of rearing a child.—Dr. Ogburn [1] has made estimates based on the costs of living for Philadelphia families with incomes between $800 and $2000 in 1918 which shows the financial cost of rearing a child. His conclusion is that in rearing a child from birth to 16 years of age $1325 is on an average added to what the budgetary costs for food, clothing, rent, etc., would have been if there had been no child. This *net increase* in outgoes includes; for clothing, $265; for rent, $80; for fuel and light, $40; for miscellaneous expenses, $220; for food, $720; a total of $1325 increase in family costs for each child. But the actual cost of what the child consumes is far more. Thus, although there is a net increase in the budget for food and clothing of only $985 yet the actual cost of the child's food and clothing is $2275, the difference of $1290 representing sacrifices made by other members of the family in order to meet the necessary expenditures for the child's food and clothing. The difference between the increase in the family expenditures caused by the rearing of children and the actual cost of the food and clothing and other items consumed by them indicates the extent to which the general family habit is adjusted to their presence. At bottom, it shows the self-denial of the father and mother.

Travel for education and for recreation.—"Americans are great travelers"—to foreign lands, yet we have never fully used our own national resources in this way, doubtless because of the conditions inherent in a broad and new land—the great distances and the lack of familiarity with distant sections of the country. In Europe, closely neighboring countries and historic conditions give a natural stimulus to travel. There are indications, however, that Americans will make more of their own land in the future as a source of education and recreation. The auto has become of course the great agency for travel within our own land. Our schools are beginning to

Bureau of Education, Bul. 1917, No. 22. This bulletin brings together many other data.

[1] Ogburn, W. F. *Financial Cost of Rearing a Child.* Standards of Child Welfare, U. S. Children's Bureau 1919, p. 26.

employ the school-excursion, and occasionally the longer school-journey, as European schools have long done. It is not uncommon for a senior class in high school to take a trip to the state capital, the state university, or some metropolitan city, and this first taste of travel is likely to make for a larger interest in it in adult life. The family group as a unit or through certain of its members joining with other individuals, is already in a position to realize pleasure from travel if there be taken into account the nearby resources which practically every community affords. There are always vacation trips to be planned ahead. This year to the mountains, next year to the lakes or coast; and a variety of goals year after year will soon contribute a rich experience. There are longer vacation trips which may be occasionally realized if plans are made ahead and necessary funds accumulated. Even the family of small income can once or twice in a lifetime arrange what would be a gala event in a long-anticipated journey to such an objective as New York or Chicago, or some other great center of population, to one or another of the national parks or state reservations, to those sections of the country north or south, or on the coasts, which always seem an attractive journey's end. With the development of our national park system, now reaching from the Maine coast to Alaska, we are learning also to appraise local scenic areas; in consequence, sections such as the Poconos, the Finger Lakes of Central New York, and the Minnesota lakes are coming into their own. There are travel goals further afield which Americans are beginning to realize, such as Porto Rico, Cuba, and the English West Indies, the Panama Canal trip and Honolulu, the South American continent, as well as Europe and the Orient.

The smaller-income family always has available at least the open road and the day's trip into the country by trolley, with the walk beyond to some favorite spot. The auto widens the radius of the day's excursion of course. Many families, too, find the small boat, which opened routes for the first settlers,

still a means of vacation travel; and the rowboat, canoe, motor-boat, or small sail-boat each has its devotees. The modern municipal policy of acquiring park lands outside the city limits, to which occasional trips may be taken and in which vacation camps may be made, is recovering again for town people the race-old experience of getting next to nature.

To one looking for information regarding travel there are, of course, the well-known bureaus, such as Cook's and Raymond and Whitcomb, as well as the newer education-travel enterprises, such as the Bureau of University Travel. The Woman's Rest Tour Association of Boston is an agency which has for twenty-five years provided invaluable information as to routes and especially places of entertainment at reasonable prices abroad, for women who desire to travel "independently, intelligently, and economically." Walking is being promoted by such organizations as the Appalachian Club and various local organizations, and the results are already apparent in the laying out of pedestrian trails in certain sections of the country. One can already look ahead to the time when walking trips will be a more common form of outing, and when the sort of travel which Stevenson made so attractive in his "Travels with a Donkey" and "An Inland Voyage" may be a part of the common lot, at least for those who plan life so as to secure and share all its good times.

There is an art of travel, and one who would make the most of it must have regard to its three aspects: first, the preparation for the journey, when in anticipation one works out the details of the arrangements, studies possibilities, and so lays one's plans that the most fun will result. Next, follows the actual journey itself, when the prepared mind keenly experiences all the possibilities of enjoyment which the situation affords. Finally, there is the after-enjoyment when one looks back to a trip, and counts over its many experiences and makes its happiness a permanent possession. Travel can be made a family experience and a source of family unity, and it is plain that one of the outcomes of the widespread use of

the automobile is a great increase in family travel as a source of recreation. The family library might well have not only its automobile guidebooks, but also some works of reference on travel, such as guides to individual cities, and a United States Guide.

Travel costs.—Facts regarding the costs of travel, if made available, might lead many families to plan definitely for certain trips. For $15, for example, one can have a two or three day excursion from New York to Washington, including railroad and hotel costs. There is a six-day sea trip out of New York to Old Point Comfort and up the James River to Richmond which costs $29. The two-day sea-trip to Bermuda costs $30 for the round trip ticket and the hotel expenses there are from $3.50 a day up. A week's cruise on the upper four of the five great lakes can be had for $72. Information regarding conducted trips can be had from the travel bureaus [1] which outline European conducted tours, lasting from one to three months, and costing from $1000 to $2000 more or less; the three or four-month South American trips, costing $2500 to $4000; and American trips, such as the following: a thirty-five day California trip from New York, including the Grand Canyon and the California resorts for about $800; the seventeen-day cruise from New York to San Francisco via the Panama Canal, costing $250; the sixty-four day trip from Boston through the national parks, including Estes, Yellowstone, Glacier, Yosemite, and the Grand Canyon, costing $1100. These conducted tours seem to cost from $15 to $30 a day for all expenses, varying, of course, with the nature of the trip and the accommodations provided.

The average person does not need, however, the services of the conducted party, and the prices quoted can be very sharply cut to $10 or $15 a day at least, where one takes the responsibility of conducting oneself and is satisfied with mod-

[1] Cook and Sons, Raymond and Whitcomb, the American Express Company, all having offices in New York and at other points. Announcements of special bureaus are found in the magazines.

erate accommodations. And experienced travelers recommend that procedure even for the inexperienced traveler. A family, or two friends, will find private travel more interesting than as members of a large conducted group, and where intellectual benefit is the goal sought, with some advance preparation one can readily get these results in self-guided travel.

Automobile travel in America can be very inexpensive on the camping-out plan; with accommodation at smaller hotels, a family of three traveled comfortably at $10 a day for car and entertainment costs (1922).

Care and cost of health.—With emphasis on preventive health measures—for example, dental hygiene—and care for slight indispositions before they develop into serious illness, the costs of health protection have become a universal charge in family budgets. Periodical medical examination, as provided recently by the Life Extension Institute, sets the ideal toward which we are moving for all families, whether in narrow or more ample circumstances. The company physician, the sick benefit of the fraternal order, health work as a part of welfare-department programs, health extension activities of life insurance companies seeking to reduce their death losses,[1] the marvelous program of rural and urban district nursing, more adequate provision of hospitals in country and town, and finally the proposed universal health insurance of working people, all these and other features of our socialized health program are aiming to reduce the amount of sickness and preventable deaths, and to distribute their economic burdens where they can be best borne. One interesting experiment is the recent English provident organization for moderate income families which for a blanket fee provides special hospital services including dental hospital treatment, X-ray, radium, etc.; the annual fee varies according to one's income and the size of one's family.

[1] The Metropolitan Life Insurance Company made about one and a half million nursing calls on its policy holders in a single year at a cost of 51 cents a call and about $4 per patient visited. See Frankel, L. K., *Modern Medicine*, July, 1919.

How much sickness is there? There is an average of 8 to 9 days illness per wage-earner at present in the United States.[1] This means that in a given year many have no illness, some are ill for a few days, others for a week or a month, and some for many months. This means a very uneven burden of illness upon different families. Practically every family has some illness every year that involves a money cost, unless income is so small that medical service cannot be secured. In Washington, D. C. (1917), nearly 90 percent of families scheduled had some sickness outlay.[2] Of Beyer's 260 Philadelphia families, 258 had expenditures for sickness, averaging $32.55.[3] More important is the question of serious illness.

The Illinois Health Insurance Commission found by canvassing selected city blocks in Chicago that 2005 or 65.8 percent of 3048 families in the blocks had had one or more cases of serious illness during the preceding twelve months.[4] Under serious illness were included chronic illness and acute temporary illness that caused disability for work, and other cases where the doctor had been called. Of the 4474 wage-earners in these Chicago families, 1222 or 27.3 percent had had serious illness, and 937 of this number, or 20.9 percent of the total, had lost one week or more because of illness. The 901 of these 927, who furnished data as to the loss of a week or more of time, lost in all 6632 weeks of time, an average of 7.35 weeks of illness for every wage-earner sick a week or more. This gives a vivid impression of the weight of sickness when one is really sick—and yet like all averages it does not give individual cases, some showing slight losses, some up to half or three-fourths of their yearly wages.

Money loss by sickness.—For 901 Illinois workers who lost a week or more of time the wages lost were $107,338 or $119 per man; the year's wages actually received were

[1] *Waste in Industry*, 1921, p. 20.
[2] *Monthly Labor Review*, November, 1917, p. 9.
[3] *Op. cit.*, p. 82.
[4] Report Health Insurance Commission of Illinois, 1919, pp. 10, 11.

$676,087; had there not been the sickness the earnings would have been $783,425—hence the loss by sickness was 13.7 percent of wages. If the sickness loss were distributed over the whole wage-earning group of 4474, there would have been a loss of $24.95 per person or 3⅓ percent of total earnings. The 901 who lost wages for a week or more actually lost the following percentages of a year's earnings:

30.7 percent lost less than 5 percent of wages
24.4 percent lost from 5 to 10 percent of wages
9.1 percent lost from 10 to 15 percent of wages
11.0 percent lost from 15 to 20 percent of wages
16.2 percent lost between 20 and 50 percent of wages
5.8 percent lost between 50 and 75 percent of wages
1.7 percent over 75 percent of wages.[1]

It is such irregularities in the loss which an insurance system would take care of, making the financial burden equal on all of a group by a uniform insurance charge.

The Illinois Health Insurance Commission found the total cost of sickness in 1667 families (of 1744 families reporting disabling sickness of more than a week's duration, out of 2589 families canvassed) to have been 8.3 percent of the wages received, or 7.5 percent of their potential income had there been no illness. In these 1667 families the average outlay because of sickness was $97.98. In order to find the average cost for all families of sickness of more than a week, estimates were made for other families reporting such sickness, and the total costs were spread over the 2598 families canvassed. On this basis the average outlay for all families because of disabling sickness was found to be $31.21 per family, and the average wage loss was found to be $39.80 per family, or a total cost of disabling illness of $71.01 per family. Adding to this an average cost for minor illnesses estimated to be $2 to $3, the total cost of illness per family becomes nearly $75. This stands out against an average family income of $1298 of which $1215 was received in wages, hence the sickness cost per family was about 5.6 percent of income. But these estimates do not in-

[1] Health Insurance Commission, Illinois, p. 15.

clude dental and oculist bills, or the occasional funeral bill. Of these 2598 Illinois families, only 981 or 37.87 percent had any dental work done (showing a sub-standard situation for the whole group); and the dental bill for these families averaged $28.20, or spreading dental bills over the whole 2598 families, the average would be $10.65.[1]

Frankel[2] reviewing various investigations concluded that sickness takes 3 to 5 percent of income in the $1000 income group; but this figure does not include sufficient dental, oculist, or nursing care. Basing his estimate on seven days of sickness per year per person or 35 days a year for a family of five, Frankel estimates that seventeen medical visits per year at $2 a visit or $35, supplemented by $10 to $20 for nursing and $10 for dental care—would give a total of $55 to $65 a year, as a minimum outlay for medical and related services.

The California Industrial Commission found (1917) an average of four percent of wages being paid for medical services by 600 working women; among 251 laundresses the amount was 5.1 percent of earnings; among 264 waitresses, 3.9 percent.

Sickness expenditure increases with income, which means that adequate care in sickness waits on increase in income. Families in Washington, D. C. (1916) with incomes of less than $600 spent an average of $12; those of from $900 to $1200 incomes spent $40, and those over $1500 spent an average of $59.[3]

Funeral costs.—The costs connected with funerals vary with income but come as a special burden on those with small incomes. Funeral costs in 36 Washington, D. C. working families (1916) averaged $123.57;[3] in 112 Chicago families, $132.40.[4] "Of the 500,000 wage-earners who die each year it is probable that the death of at least one-half is post-

[1] Health Insurance Commission, Illinois, pp. 16-17.
[2] Frankel, Lee K. "Sickness Costs and the Family Budget." *Modern Medicine.* July, 1919.
[3] *Monthly Labor Review.* Nov., 1917, p. 9.
[4] Illinois Health Commission, 1919, p. 17.

ponable.[1] Some of these costs are therefore postponable, but the real issue is how to reduce them.

Dowd's *Funeral Cost and Management* [2] has pointed out the economic wastes in present funeral customs. It is no new wrong that he is attacking, for readers of Mark Twain will remember his strictures on this social folly, yet despite attacks of humorist and reformer its steadily mounting cost remains one of the heaviest emergency burdens of the small income family. How will progress come? It is evident one has to deal with a folk-way of the most deeply seated type, varying with different races and nations; and that customs in this field will be modified only slowly.

The demands of sanitation, the claims of the living as against those of the dead, revelations of exploitation by commercial interests, multi-burials in single grave, a revolting old world practice that is already getting its footing in America, these and other considerations will gradually move individuals to make for themselves the choice of simple obsequies and cremation rather than ostentatious funeral display and earth-burial. The funeral is a matter of municipal control if not of direct municipal service in parts of Europe and this system may in time be adopted here, although the grading of the services rendered as 1st, 2nd, and 3rd class with fee respectively at $12, $52, and $70 as in one European country, does not meet American ways at present. In Japan, cremation costs from 50 cents to $3.50.

Municipal ownership and operation of cemeteries and crematories is a progressive step which might be taken immediately and even before this a program of active supervision of funerals by local boards of health might be instituted. There are at present 76 crematories in America and Mr. Dowd estimates that America needs at least one for every city of 50,000 or more population, which would require 95 at least. Among the obstacles to progress are the present indifference to

[1] *Waste in Industry.* Federated American Engineering Societies, 1921, p. 21.
[2] University of Chicago Press, 1921.

reform on the part of the religious and fraternal and similar organizations having to do with funeral observances. The churches especially could help bring in new ideals. The commercial interests that benefit from a continuation of present customs include: the undertaking profession as now constituted, casket and funeral supply manufacturers, cemetery companies, marble and mausoleum companies, florists. horse and auto liveries, etc. Industrial insurance which largely provides funds for wasteful funeral expenditures thrives doubtless on the desire for display, and an alteration in funeral customs and expense might affect this business, although other motives for insurance and savings are available and need but to be stressed. For example, savings in the form of endowment insurance on each child, to mature at 20 years of age, would have social values outweighing present "burial insurance." Were the insurance companies to undertake a program of constructive thrift and work gradually to check excessive funeral costs they would render a service as signal as their remarkable health education work.

Religion and philanthropy in the budget.—The family should take an active part in the religious and social work enterprises of its community and bear its due share of their costs in its budget. We have the traditional contribution of the tithe to religious organizations, and many families practice tithing; indeed, there has been in recent years a movement in many of the churches which has greatly extended this practice. Part of the principle of tithing is the budget idea, namely, that of setting apart a definite allowance for the claims upon the family purse; the distinctive point in tithing is the setting apart of one-tenth of the income as a contribution to religious work. Whether one assigns this definite percent or not, it is certainly a part of wisdom to make a definite allowance for religious and philanthropic contributions, and distribute the amount most carefully. There will be first of all the religious organization to which the family belongs, and various enterprises in connection with it. No thoughtful per-

son can review the educational program of the modern church in neglected sections of our own country and in backward countries as well without wishing to have a share in it. A Rockefeller may endow an international health institute or establish medical education in China, but the church has now for several generations been carrying on a world-wide educational and medical service as adjuncts to its religious missionary work, which all observers agree to be one of the fundamental influences in world progress and world integration. In the local community the church stands as a social-welfare institution midway between the individual family and the municipal government and other community welfare organizations such as charity societies. The church's relief work reaches a multitude of cases which are not within the capacity of an individual family to remedy and which, because of the activity of the church, do not pass over into the formal poor relief of the community. For the great mass of people the church is the institution which provides opportunities for social recreation through its men's clubs, women's aid societies, boys' and girls' clubs, and similar enterprises. In the field of religious education it has a unique responsibility, and fortunately progressive movements are under way in the form of graded Sunday schools, week-day religious schools, trained supervisors and the like, to bring into this field the higher standards of teaching which day schools have only recently themselves acquired. All of this is over and beyond the fundamental function of the church as the institution of worship and ethical stimulus.

The home has a call to cooperate with the church in a more intelligent way similar to the call for cooperation between the home and the school. There should be more intelligent participation by the family in the activities of the church, both at the church building and within the home itself. Progress in Sunday school work, for example, waits in part upon a demand from parents that trained teachers must be provided in the Sunday school just as they are provided in the day school,

When these trained teachers are secured, parents will be expected to cooperate in using the processes of home life to develop the fundamental ethical and religious attitudes in the child. One of our leaders in religious education has pointed out that the child's first participation in household tasks, such as helping set a table, lays the basis for the beginning of unselfishness in the child, and that all the flowering of personality into the finer qualities which we regard as religious can be traced back in part to the formation of unselfish practical habits in the home. The home which opens its doors to a club of boys or girls or a social group of their elders engaged on some enterprise connected with the church will find the experience stimulating. Too often these contacts between church and home are confined to a few families, when they might often in simple ways directly reach many households.

The family should also make contacts with local organizations engaged in philanthropic work. Every family should give each year some small contribution to the local charity organization society or whatever enterprise looks after families in distress, to the local hospital, orphanage, and other similar institutions. The church does wisely when it introduces into its own program the support in a small way at least of these local undertakings. It can do so without interfering with its own charitable enterprises, and so broaden the sympathies and the intelligence of its own people in terms of local charitable work as well as the program of religious and general education, medical and social welfare work which the church itself is promoting at home and abroad.

Gifts.—The family budget needs to make some provision for that giving to relatives and friends which is part of the grace of life. This is apart from those payments to religious and charitable organizations which one may regard as a social responsibility resting upon those who have, to give to those who need. In these friendship gifts we are dealing with quite another matter, namely the expression of affection to those within the family and to those outside for whom one has per-

sonal esteem. Such gifts are both a token of the past and a pledge for the future. They may vary in character from some useful object which carries a utilitarian sanction to something which, like flowers, is a gift which expresses the spirit of the giver. Both kinds of gifts have their place within the family and outside. It is natural for parents who are looking ahead prudently to the future of their children to place in their hands something which may have a use to-day and a promise of still larger use for the future. So gifts of money or some object of practical significance may be given.

Giving is an economic activity that must be learned just as earning must be learned and saving and spending. Sometimes a great national crisis teaches a whole people to give; or the need of a distant community or country in distress because of fire, flood, or famine loosens every one's purse-strings. The immediate need of those about us, those whom we know in our own community, is the most common stimulus to giving, and everyone knows the person who when asked to contribute to some distant purpose says "There is so much need here in our town, we must meet that first."

Liberal giving without receiving again is the mark of the family relationship, and as we give outside the family we are practicing more widely what is really a family habit. Children should have the opportunity in the family to talk over objects of giving, to balance up one agency against another as to the services they render, whether merely palliative or remedial or whether constructive as to preventing distress. Every family has also its own opportunity to render service to those in need, its own relatives, its immediate neighbors, and others in its larger neighborhood of church, industry, or community.

We should not give because people want us to give, unless the purpose is not only a socially justifiable one, but is one of the purposes which we can best promote. "Foolish charity due to a desire to relieve suffering is as great an evil as mob violence due to a desire that justice shall prevail" says Miss Brandt. "To demand that benevolence shall not harm is the

first step."[1] Contributions that eliminate causes of distress and misery are more important than immediate relief of individuals. Giving to individuals that increases their economic productivity, as by means of education or medical relief, or that improves their supporting social contacts as by returning a man to his family, are more than mere alleviation since they create better permanent functional conditions for the individual.

How much to give.—Miss Brandt[2] has suggested the following principle to guide one in giving: One should not give money needed for the highest development of himself and those dependent upon him by natural ties; one cannot afford to give to philanthropic purposes which do not accomplish their benevolent intentions; one should give critical and intelligent thought as to the objects of giving as well as give money. As to gifts of money, Miss Brandt's principle reads: "A man can afford, and ought, to contribute to philanthropic purposes such a part of his income as his informed intelligence, guided by a sincere concern for the common welfare, dictates; and this amount he can afford, and ought to give, 'even though he be the poorest man in Israel.' "

The War Chest campaigns in many cities inaugurated the method of advising givers how much they should donate, the theory being that everyone would wish to contribute something, that the contribution should be in proportion to income, and that donors should welcome suggestions. The minimum amount, that expected from wage-earners varied from one-half of one percent to four percent of the income; the percentage to be given increased with income; and the maximum ranged from three percent to fifteen percent and was reached on anywhere from $3000 to $100,000 a year incomes. "Give one hour a month"; or "one day a month"; or in the open country, "give 25 cents an acre," were among the slogans used. Miss Brandt has summarized these scales as interesting facts,

[1] Brandt, Lillian. *How Much Shall I Give?* pp. 133, 136.
[2] *Op. cit.*, pp. 119-123.

not as rules to follow. For example, Detroit recommended a two percent contribution on a $1000 income and ten percent on a $100,000 income; while Kalamazoo, one-half of one percent of $1000 and four or five percent of $75,000.

A scale of giving devised by Paul and Dorothy Douglass based on the total national philanthropic needs of one billion seven hundred million dollars a year and the ability and attitude of different income groups, calls for: one-tenth of one percent of $1250 a year, increasing to one percent of $2100; 2 percent of $2750; 3 percent of $4500; 4 percent of $7000; 5 percent of $12,500; 12.6 percent of $65,000, increasing to 27.2 percent of $95,000. Thereafter the percentage of income given decreases although the actual amount given increases (due to larger share taken by income tax). While the amounts on the smallest incomes are perhaps less than people often give, yet they are justified doubtless as minimum recommended amounts.[1]

Objects of philanthropy.—How can I know that my gift goes to a worthy cause? If in doubt as to a particular agency one can in most cities get detailed information about it either from the Bureau of Information of the local Charity Organization Society, or of the local Chamber of Commerce. A recent movement which looks in part to reassuring and guiding contributions to philanthropy is the local financial federation or association of social agencies which makes a composite budget and presents a joint financial appeal to the public, all agencies to share in the contributions received. This of course is a plan like the "war chests" established in 300 American cities of making a joint appeal for all war charities; in several cities the war chests included gifts to local charities, and in a considerable number of cities the war chest has passed over into a permanent joint plan of financing local social welfare enterprises.

All families even on small incomes should contribute to philanthropy and social work; and including here the church

[1] *American Economic Review.* Supplement, December, 1921.

contribution, families do so quite generally despite small income limitations. Such a contribution is a practical broadening of life, it brings new interests to the individual; moreover, as Miss Brandt points out, widespread support of social welfare work, brings to the enterprises concerned the ideas and point of view of the whole community. A charity organization society or hospital which succeeds in securing small contributions from wage-earners will have in their continued support a proof that it is rendering its services efficiently to their friends and neighbors. The "hospital fund Sunday" which has become a special church observance in some cities is educational as well as financial in its results; a similar day for contributions to charity organizations would broaden their field of support and bring many more families into intelligent contacts with social work.

Intelligent giving can be promoted systematically as a part of religious education; the family can also do much to stimulate critical thought regarding gifts and their objects by discussion about the family table to the benefit of old as well as young. The budgeting of family incomes will lead directly to this result.

Giving is originally a matter of instinctive reaction to misery and suffering; even modern philanthropy in its money appeals sometimes only plays upon the feelings of the giver. "The gift without the giver is bare" and one practical meaning is that we should follow our possible gifts through to their application and see that they achieve the purpose intended, and that the purpose is one that promotes social welfare. We need to know social agencies of our own community, our state, and nation and see that our gifts operate to change conditions causing misery. Shall I give to a day nursery that cares for children of widows who must earn, or help a legislative movement to secure social insurance for widows? Shall I loan money to keep a boy in school, or give money to a child-labor committee working for laws to keep children in school? Both if I can, but some gifts surely should go to remedial agencies that will

change conditions. Here are problems worthy of family discussion, both for the practical problem of making the best possible budget, and even more for the satisfaction of sharing widely, and for the guidance such discussions will afford children.

Political and civic responsibilities.—The family is a small state; that is, its own members are citizens of the larger state and hence they should have regard to community and broader political questions, and become active participants in political society. This may mean simply that the family discussions at home touch questions of national and local politics, and that the man and woman go out to vote knowing where they stand on the questions at issue. In any place where there are children, civic education is a first responsibility, and the family should consider these matters from the view-point of the child. This means a continuing consideration of political questions, and not simply a little attention at election time. Any local government is a great school of social issues, and lessons can be drawn for state, for national, and indeed for world government.

Shall the adults take an active part in politics? They must realize that political organization is well established and is effective in reaching results. Intelligent young people feel drawn toward reform politics. They must make the choice whether to work in with present organizations or try to effect a new organization in their community. Local conditions must determine the answer, but a group of such young people working from within an organization may often accomplish more than as a reform party. At any rate the family budget should carry some small allowance for contributions to a political organization, for its legitimate expenses of maintaining a club-house, political meetings, and publicity.

In every community we need more of public discussion of politics and government, and a political club can provide opportunities which the family will do well to avail itself of. In the matter of securing progress in international affairs, we need

more than anything else increased thought on the part of the individual with regard to the issues involved, and a plan for local meetings to present the issues, and home discussion by family groups would help carry this matter forward.

Summary.—In providing and maintaining the social and personal factors in the home-making process are rendered the most important services of economic income to the family group. Looking first outside the family, there are its relations to community and political organization by which the family group makes its contribution to social culture and progress; there is the support of social welfare work by which dependent individuals and families are if possible restored to self-support, and there are contributions to religious institutions, by which the spiritual fabric of society is maintained, and to the work of education, by which knowledge is promoted. These and other social agencies, by direct contribution or by taxation, draw their support from the family purse and make their return to the personal resources of individuals and families. And within the family group itself there are activities and resources that contribute to the development of personality, such as hospitality, reading, music, travel, recreation, and the whole round of cultural satisfactions that modern life brings in addition to the primary physical services of food, clothing, and shelter. It is these higher aspects of life, both within the home and in the community, which personal or advancement expenditures secure.

CHAPTER XVI

HANDLING HOUSEHOLD RESOURCES

This chapter will give some practical plans for handling the financial and other economic resources of the household so that they may best meet the needs of the family. It will consider financial records including income and expense accounts and capital accounts of property and debt, and it will give forms for current records and for summaries, as well as plans for budgeting the income. General standards of expenditure will be stated. Finally the problems of personal adjustment of husband and wife and of children to family finance will be presented.

Financial records for the household.—There are two questions which financial records should answer:

(1) How much income have we received in the last week, month, year, and how much have been our expenditures for various special purposes during that period?[1] and (2) how much are we worth to-day over and above our debts? and, how much has this net value of our property grown over the net amount we were worth last year and the year before that?

These are respectively the questions of income versus expenditures during some past period of time, or of how much we are earning, what it costs to live, and what we are saving; and the question on a definite date of resources or property versus debts, or of how much more than our debts we are worth at this given time. To anyone who tries to use the material

[1] We shall think of this for the time being as a matter exclusively of cash received and paid out, or receipts versus payments and disregard items of income accrued but not received, or of expenditure incurred but not paid.

means of life intelligently so as to secure the best possible living, it is obvious that the facts of two schedules like the following can serve as invaluable charts for domestic management.

1. Example of Income Versus Expenditures Summary for the Year Jan. 1–Dec. 31, 192—:

A. *Income*		
Salary	$3,000.	
Interest	180.	
		$3,180.
B. *Expenditures*		
Rent	$600.	
Food	720.	
Clothing	480.	
Housekeeping	300.	
Personal allowances	300.	
		$2,400.
C. Net surplus or savings for year 192 —		$ 780.

2. Example of Balance Sheet of Resources Versus Liabilities on Dec. 31, 192—:

A. Resources or property		
Cash in bank or purse	$ 440.	
Savings bank account	560.	
Liberty bonds	1,200.	
Other bonds	600.	
Home owned (value)	7,200.	
Life insurance (cash surrender value at this date)	3,000.	
Total resources		$13,000.
B. Liabilities or debts		
Accounts payable at stores, etc.	$ 100.	
Mortgage payable	2,400.	
Total debts		$2,500.
C. Net worth, or resources (A) less liabilities (B)		$10,500.

Two financial record books are needed: a Cash Book of receipts and payments, which may be kept in various ways; and a Household Ledger or book of permanent record of property

and debts, to which also the totals of the cash book and financial summaries of the sort just given can be transferred.

Cash Book—Receipts and Payments

Records of receipts and payments.—The Cash Book records all receipts and payments of money, showing for each item the date, the amount, and such descriptive facts as may be desired. It is a record of inflow and outflow of actual money—it does not take account of items charged or items due us; by comparing the total money received and the total money paid out up to any date one gets a record of "the balance" of money which should still be on hand. By comparing this book balance with the actual money in one's purse, bank account, and elsewhere one has a check upon the completeness of one's record of cash receipts and payments. There has been a tendency in personal and household accounts to overemphasize the balancing of the cash account; not that the balance has no significance, but that for personal accounts other things are more significant than an absolutely complete record with an exact balance; and particularly important is the qualitative description or classification of items of expenditure. Do not unbalance your mind by trying to balance your personal accounts to the last penny is good advice; better to enter the missing items—unless they are so large as to be significant—under "payments unaccounted for" or "receipts unaccounted for."

Cash Book. The simplest form of cash book is a memorandum book ruled on each page, with a date column, a broader column for description of items, and two money columns at the right, the first or left column for receipts, the second or right column for payments. Each item is dated and described as it occurs, and if it is a receipt the amount is entered in the left money column; if a payment, in the right column. The first entry in such a book is naturally the money "on hand" when the book is started, and this is put at the top

of the receipts column with a dated entry opposite, "money on hand"; then there follow receipt and payment entries as they occur. If at the end of a day or a week—or whenever convenient—it is desired to balance the account, the two columns are added, or totaled, the sum being written in pencil in small figures at the bottom of the two columns; the smaller total (payments) is subtracted from the larger total (receipts)—by custom in a memorandum form in some vacant space on the face of the account—and the difference indicates the cash balance which should be in hand. This book balance should be immediately checked against the actual cash balance in purse and bank. If they do not agree, the actual balance will probably be found the smaller since some money has been expended for which a payment entry has not been made (or a receipt item may have been omitted). By subtracting the actual balance from the book balance, determine the amount of the lost item or items, and enter the amount in the expenditure column as "payments not accounted for," or vice versa, as "receipts unaccounted for" where a receipt item is omitted; then find the new book balance, which will of course agree now with the actual cash balance. If it is desired to indicate the balance formally in the account as for example at the end of the month, this balancing item is entered in the payment column, as the sum of money which, added to the payments, makes the total of that column equal to the total of the receipts column, the word "balance" being written in the descriptive column with the date on which the balance was struck; the two money columns are now ruled off, and totaled in ink, the totals now being alike; a double ruling is then drawn across the money columns to indicate their equality. It is now in order to prepare the cash book for reopening the account for the next period of time, as for the next month. This is done by entering the balance in the receipts column as the first item of the new period and then proceeding with receipt and payment entries as they occur. A simple form of cash book is illustrated herewith.

ILLUSTRATION OF SIMPLE CASH BOOK.

1922		ITEMS	RECEIPTS	PAYMENTS
Nov.	1	Balance (bank $250, purse $25.50)	275.50	
	1	Rent		40.
	1	Food (Crabtree's bill)		60.
	1	Salary	400.	
	30	Brown Co., Clothes for C		32.
	30	Balance on hand		543.50
			675.50	675.50
Dec.	1	On hand	543.50	

The columnar classification cash book.—Special columns for classifying receipts and payments are the most convenient modification of the simple cash book, as they automatically show not only receipts in general and payments in general, but also how much has been received from various individual sources and how much has been paid for various individual purposes. The device consists of adding as many income classification columns as there are distinct sources of income to keep track of, and as many payment classification columns as there are distinct objects of expense which it is desired to recognize. Ruled forms can be secured so that columns may be lettered as desired for this and other schedules suggested.[1]

Then payments are entered not only as "payments" in the general payment column, but each item is entered again in a special column bearing the name of the class of expense to which it belongs; similarly all receipts are entered first in the general "receipt" column and then entered again in the particular column bearing the name of the class of receipts concerned. As many or as few kinds of expenses and of receipts can be recognized as may be desired. For each budget item a budget allowance figure may be written in at the head of

[1] Loose-leaf forms with a cover are desirable; cross-section paper may be used or a special paper, e.g., "Analysis" paper.

ILLUSTRATION OF LINE-PER-ITEM CLASSIFIED CASH BOOK.

DATE		BUDGET ITEMS	RECEIPTS	PAYMENTS	RECEIVED FROM			PAID FOR				
					SALARY	RENT	INTEREST	FOOD	CLOTHING	HOUSE	HOUSE-KEEPING	PERSONAL
		BUDGET ALLOWANCES						100.	50.	40.	50.	100.
1922		ITEMS										
Nov.	1	Balance	275.50									
	1	Rent paid.....		40.						40.		
	1	Smith's for Oct.		60.				60.				
	1	Salary	400.		400.							
	30	A's brown suit		32.					32.			
	30	Balance		543.50								
		Totals	675.50	675.50	400.			60.	32.	40.		

the expenditure columns and receipt columns if desired. An illustration of a form which provides a line of the record for each item of receipt or expense (a line-per-item form) is shown opposite; in actual accounting the general heads of expenditures will often be divided into many subheads with corresponding columns.

The line-a-day form.—In preparing the columnar cash book for household accounts, two ready-made commercial forms have been placed upon the market, one of which may be called the line-a-day form, and the other the line-per-item form. The latter has been illustrated above. Its peculiarity is that a separate line in the account is used for each item—this gives more space in the itemization column for detailed description of the receipt or payment, a matter of importance in providing information for later reference. The line-per-item has the disadvantage however, that the entries quickly fill up a page since each entry however small requires a line by itself; hence a single month's cash record requires several pages, which is a waste of blank paper and an inconvenience in examining the accounts. In the line-a-day form, all the transactions of a day go on one line; the form is printed with 31 record lines to the page, each page providing space for a month's record in compact form, entirely complete as far as amounts and their classification are concerned, and lacking only full memoranda descriptions of each item. Experience shows that the line-a-day form gives usually all the facts that are required and when desired other data can be entered upon the face of the account page in explanation of some particular item. The line-a-day form is illustrated on following page.

The totals of receipts and payments.—In each of the two Cash Book forms just given, totals have been cast up at the foot of the columns. These are a most important aspect of the cash account as the totals received from various sources of income and the totals expended for various types of outgo are the most important figures for budget control. In the budget, one has set certain limits on spending; the growing

ILLUSTRATION OF LINE-A-DAY CLASSIFIED CASH BOOK.

YEAR 1922 MONTH NOV. DAY OF MONTH	BUDGET ITEMS	RECEIPTS	PAYMENTS	BALANCE	RECEIVED FROM			PAID FOR				
					SALARY	RENT	INTEREST	FOOD	CLOTHES	HOUSE	HOUSE-KEEPING	PERSONAL
	BUDGET ALLOWANCES							100.	50.	40.	50.	100.
	ITEMS											
1st	Bal. 275.50	400.	100.	575.50	400.			60.		40.		
2nd												
3rd												
4th												
30th			32.	543.50					32.			
31st												
Totals		400.	132.		400.			60.	32.	40.		

totals in the various classification columns of the cash account furnish the answer as to whether budget allowances are being observed. It is customary to foot up monthly totals at the bottom of these classification columns; it is even more desirable to secure weekly totals by entering memorandum total figures in the columns, and then carrying each weekly total ahead into a cumulating total at the end of the next week thus showing how much has been spent to date—at the end of one week, at the end of two weeks, three weeks, etc., for the given purpose. These sub-totals may be written in smaller sized numbers or may be indicated by a parenthesis. Thus a food column with a weekly total that is carried forward into each next week's total may read as follows:

7.50	5.75
4.00	1.00
6.30	(53.70)
2.00	5.00
3.70	7.80
4.90	3.00
(28.40)	2.50
4.20	4.20
7.90	6.00
3.80	(82.20)
2.65	etc. to end of month.

Checking expenditures by budget allowances.—The budget system allows definite amounts monthly for each item of expenditure, and compares expenditures as made with the monthly allowances. Writing the budget allowance at the top of the expenditure columns is convenient for comparisons. Many expenditures are seasonal or occasional, however, as are clothing and house repairs, for example, and it is necessary to build up budget allowances through several months against a large outlay; or an unexpectedly large outlay, as for sickness, may run beyond the available monthly allowance for the "health" item, causing an over-draft which will gradually be reduced by succeeding monthly allowances for "health." A

simple device of additional horizontal rulings in the footing of the classified columnar Cash Book will give a very convenient perpetual check between budget allowances and actual expenditures, which when more than the allowance has been spent for a given purpose will record the over-draft and carry it along as a charge against next month's allowance, or which, when less than the allowance has been spent, will record the surplus left from the allowance as available in the next month's allowance. As shown on page 529, a footing space is provided immediately below the "Monthly Total Expenditures" for entering "Monthly Balance—Surplus (+) or Over-draft (—)," in which any surplus of the monthly budget allowance for an item over the monthly expenditure for that item is entered with a + mark, and any over-draft for that item beyond the allowance is entered with a — mark. In the next footing space below this "Monthly Balance—Surplus or Over-draft," there is space for the "To-date Balance of Surplus (+) or Over-draft (—)" for the item, which is secured by combining the "Monthly Balance—Surplus or Over-draft" with the "To-date Balance" at the end of the preceding month. So at the end of each month a statement is made of the balance of surplus or over-draft for each item to that date, and that stands as a significant guide for the next month's spending; and at the end of that next month's spending it is combined with the month's surplus or over-draft to show the situation at that date.

In the following table, with no surpluses or over-drafts in starting the year, the food items are as follows: a budget allowance of $75 a month is provided, and January food expenditures of $60 leave a "+$15" surplus in the "Monthly Balance of Surplus or Over-draft"; and since there is no surplus or deficit from a preceding month, the "To-date Balance or Surplus or Over-draft" for January is the same, viz., "+$15." In February the food allowance is $75 and the monthly total expenditure is $70, hence the Monthly Balance of Surplus or Deficit is "+$5"; the To-date Balance of Surplus or Deficit

CASH BOOK WITH BUDGET SURPLUSES AND OVER-DRAFTS.

JANUARY

DATE	BUDGET ITEMS	FOOD	CLOTHING	HOUSE	HOUSEKEEPING	PERSONAL
	Budget allowances.....	75.	25.	25.	20.	40.
1						
2						
3						
..	.....	....	....	....	....	....
31						
	Monthly total expenditures	60.	50.	10.	15.	50.
	Monthly bal. of surplus (+) or over-draft (—)	+15.	—25.	+15.	+5.	—10.
	To-date bal. of surplus (+) or over-draft (—)	+15.	—25.	+15.	+5.	—10.

FEBRUARY

DATE	BUDGET ITEMS	FOOD	CLOTHING	HOUSE	HOUSEKEEPING	PERSONAL
	Budget allowances.....	75.	25.	25.	20.	40.
1						
2						
3						
4						
..	.....	....	....	....	....	....
28						
	Monthly total expenditures	70.	5.	5.	25.	40.
	Monthly bal. of surplus (+) or over-draft (—)	+5.	+20.	+20.	—5.	0.
	To-date bal. of surplus (+) or over-draft (—)	+20.	—5.	+35.	0.	—10.

—by combining this February balance of +$5, with the "+$15" from the end of January—is a "To-date Balance" of "+$20" for the end of February. The clothing allowance of $25 in January, with the Total Monthly Expenditure of $50 make a monthly clothing balance of an overdraft of "—$25" at the end of January; February's allowances of $25 and expenditure of $5 leave a February monthly balance of a surplus of "+$20"; and this, combined with the January "To-date Balance" of Over-draft "—$25," makes a February "To-date Balance" of Over-draft of "—$5." The "House" January expenditure of $10, leaves a monthly surplus of "+$15"; which combines with the February monthly balance of $20, to give February a "To-date Balance" of "+$35." So each budget item is carried forward through the year month by month as to its accumulating surplus or overdraft.

Accumulation table for savings.—Another method of watching funds that have to be built up is by an accumulation table. In this, savings and reserves may be entered under several heads: first, family reserves for definite seasonal needs just ahead as clothing, fuel, vacation fund, and for special family goals that require an accumulation out of income; next, the general emergency reserve for unforeseeable contingencies; next, the old age fund and life insurance payments to be made; finally, a personal reserve for each member of the family, which with the child represents two objects, first the far-off education and start-in-life fund, and second whatever larger desired expenditure calls for personal saving, and with adults whatever cherished goal they may have, as a travel fund, special clothing, some gift, etc. The more concrete and varied the goals held in mind for the saving program and the wider the range of motives to which it will appeal, the more successful it will be, and the greater will be its contributions to the satisfactions of life. An accumulation table such as the following placed in one's cash record book and inspected at least monthly in family council will help realize these possibilities.

ACCUMULATION TABLE FOR FINANCIAL RESERVES AND SAVINGS FUNDS.

	JANUARY, 192—			FEBRUARY		
For seasonal spending	SAVED	SPENT	BALANCE	SAVED	SPENT	BALANCE
Clothing						
Fuel						
Vacation fund, etc.....						
For special family goals						
House fund						
Equipment fund						
For emergency reserve						
House repairs.....						
Illness and other.....						
For old age fund.....						
For life insurance premiums						
For personal reserve funds						
Father						
Mother						
I—						
M—						
E—						
Totals	....	....	....	....	....	....
Balance at end of month represented by			....			....
Savings bank balance..			....			....
Reserve in checking account			....			....
Personal reserve funds.			....			....
Total			....			....

Routine in keeping accounts.—Accounting can be best reduced to habit, that is, made a mechanical routine. There is first the daily routine of entering receipt items and payment items in their proper columns. Where several persons in the family handle family cash and make expenditures, this daily entering of items is rendered more difficult. One solution is to keep detailed records only of the main household expenses, and charge personal allowances without making any detailed entries for these allowances. Where the omitted details are personal items such as lunches and car fares, the total so expended is the important matter and the entry as stated is suffi-

cient; where the omitted facts concern an important item such as the family food supply this is not satisfactory. In the latter case a better method is for each person handling family moneys to run a pocket memorandum book of items spent, from which expenditures are transferred periodically to the family cash book. A husband and wife may find it convenient to keep the central record of family expenses in a common book and cover personal needs with allowances charged to each; or it may be a matter of common interest to check over their personal outgoes and enter them in the family record book.

While account keeping is facilitated by routine, its benefits will be secured only by studying the facts of expenditure as revealed by the accounts and in replanning the use of money to secure better results. Planning of expenditures and weekly and monthly examination of records to see that the plan is working, are the most important practices in securing benefits from accounts. Too often household accounts have merited the opprobrium of "epitaphs on dead money"; it is the summaries of accounts which make possible significant comparisons and the redirection of spending.

There should be a weekly routine at the end of the week in checking up accounts to date, in being sure that all items are entered that can be recalled or transferred from personal memoranda, and especially in making sub-totals in all classification columns and in making comparison with the budget limits set for the various items. Weekly comparison will prevent some line of expenditure from running away with the month's surplus before one is aware of it.

The routine should next provide a regular monthly totaling of all classification columns and an inspection and comparison of the month's totals with those of other months. This can be done of course by leafing over the cash book and comparing similar totals at the foot of the classification columns—for example, for housekeeping expense or any other item. A more convenient way is to transfer these totals each month into a monthly summary or recapitulation table. A convenient form

of this with the names of the months down the left margin, and the names of the receipt and payment items as headings to the columns, follows. A more detailed classification will often be found useful—for example, with separate items for different operating expenses, etc.

MONTHLY SUMMARIES OF RECEIPTS AND PAYMENTS FOR YEAR 19—.

	TOTAL RECEIPTS	TOTAL PAYMENTS	RECEIPTS FROM			PAID FOR				
			SALARY	RENTS	INTEREST	FOOD	CLOTHING	HOUSE	HOUSE-KEEPING	PERSONAL
January										
February										
March										
April										
May										
June										
July										
August										
September										
October										
November										
December										
Total for year 19—										

Annual Summaries.—The routine should also provide for an annual review of income and outgo totals for the months with the making of annual totals, which will naturally come at New Year's; though there may be reasons for taking another time, as that of the end of the school year for a teacher's family; or two periods of six months, or indeed of unequal length, where a family lives in town in winter and in the country in the summer. Using the same period in successive years will permit helpful comparisons. A yearly review sheet of the same general form as the monthly summary is desirable, to which the general footings from the monthly summary forms may, year by year, be transferred, thus:

ANNUAL SUMMARIES OF RECEIPTS AND PAYMENTS.

YEAR	TOTAL RECEIPTS	TOTAL PAYMENTS	RECEIVED FROM			PAID FOR				
			SALARY	RENT	INTEREST	FOOD	CLOTHES	HOUSE	HOUSE-KEEPING	PERSONAL
1922										
1923										
etc.										

This annual summary of receipts and expenditures may well be entered in the Household Ledger. Another annual summary of the greatest importance is the balance sheet of property and debts described below.

The check book as a cash account.—Where all money received can be deposited in the bank and all large payments made by check, this simplifies keeping the cash account, since the check stubs give the original record of all receipts and of most payments. Some individuals find it helpful to classify check expenditures though keeping no account of purse-money expended, except that the total of it is indicated by the "cash" or "self" checks drawn during the month; where checks drawn to special purposes cover 80-90 percent of one's outgoes, the check book record may be adequate for an individual or a family, but usually so much money has been handled in unaccounted-for-cash that a purse-money record is also needed to classify the amounts spent in that way. It is then necessary to unite the check expenditures with those of purse-money in order to get a classification of all outgoes. The line-a-day book used during the month for cash expenses serves admirably in the connection; the check expenditures can be put into its classification columns once a week or once a month or better yet, day by day as they occur, as thus accurate classified totals of all payments made can be secured at any time, whether payments were made by currency or check. Where the classified cash book is to be made the entry place for all payments, the

special columns for bank record (see below) may be useful in bringing all check transactions into the classified cash record.

Charge accounts and the cash book.—Charge accounts are usually not entered in the household accounts until they are paid since the cash book is a record of actual money receipts and payments only; as a result, charge items stand out as a temporary and growing indebtedness, usually unknown in amount until the monthly bills are rendered. To a family trying to control its finance, such a situation breeds trouble. Such charged items are expenditures in the sense that debts have been incurred, but they are not actual payments and so would not be entered in the ordinary cash book as are payments of currency or checks. Keeping sales slips is one way to get a record of charge items and if classified and kept in order they may be sufficient. The classified cash book which usually contains only paid items can be supplemented to bring into its classification items charged, at the time when the charges are made. This may be done by adding two columns to its form with headings, "items charged" and "charges paid." Then as an item, say a suit of clothes or a grocery bill, is charged, the amount of it is entered in the "items charged" column under the appropriate date, and at the same time the amount of the charge is repeated in the classification columns under "clothes" or "food" as the case may be. So every charged item is entered the day it is incurred both in the "items charged" column and in the proper classification column. Classification expense columns now show the total expenditure to date—both payments by currency and check and also the charge items incurred. Later on when a charge item is paid an entry of cash paid out is made in the general "payments" column and the amount is written in again as a classified item in the "charges paid" column, but not in the column for "food" or "clothing," etc., since this classified item was entered as food or clothing, etc., when the "items charged" entry was made.

An example will illustrate the use of the "items charged" and "charges paid" columns. In this form, note that the heading over the classification columns for outgoes is called

CASH BOOK WITH COLUMNS FOR CHARGED ITEMS.

DATE Year 1923 Month Dec.	ITEM	CASH RECEIPTS	CASH PAYMENTS	RECORD OF CHARGE ACCOUNTS		EXPENDITURES—CASH AND CHARGED				
				ITEMS CHARGED	CHARGES PAID	FOOD	CLOTHES	HOUSE	HOUSE-KEEPING	PERSONAL
Day										
1		400.	20.	30.		20.	30.			
2				60.		40.	20.			
3										
4										
30			90.		90.					
31										
				90.	90.					

"Expenditures" (which includes items incurred whether paid at once or charged) rather than "payments" (which includes money payments only).

The monthly totals of "items charged" show the whole amount bought on credit; the total of "charges paid" shows the amount of this which has been met. Any balance unpaid will be shown by the excess of the charges over the charges paid. This should be carried forward at the beginning of the new month as the first item in the charges column. If one is charging items more or less constantly and making payments of charged items it may be helpful to use a third balancing column called "Balance due on charges," and carry this along as a constant balance.

When it is desired to keep a record of charges made and charge items paid at some one particular store, a set of two columns added to the cash book and bearing the name of the store will provide this record. The items of this store alone

are entered in these columns, charges in one column, payments in the other; their totals at any time give the standing of this one account.

Once-a-month-expense items.—In housekeeping expenses there are a number of items which occur regularly in a single item every month, such as rent (unless home is owned), light, gas, telephone, ice, commutation, water rates, etc. Space is wasted if a whole column is devoted to each of these monthly items, yet it is advisable to keep separate accounts of them. This can be done by introducing these items one after another in the space occupied by a special column on the cash book page, under a heading, "Monthly Charges" thus:

MONTHLY CHARGES.	
Rent	$.....
Commutation	.....
Telephone	.....
Gas	.....
Electricity	.....
Water	.....
Ice	.....
Total monthly charges	$.....

Cash book with constant balance.—By introducing a third column into a cash book with the heading "balance," following the Receipts and Payments columns, it is possible with each new receipt or payment to enter in this column the balance as affected by this item. Such a constant balance is helpful where one wishes to keep before one the amount of money on hand as increased by each receipt and decreased by each payment. Any of the columnar forms heretofore shown can be modified as illustrated in "the simple cash book form with balance," below. Note that the balance column now carries the amount of money showing the balance, and that at the end of a month the receipts and payments column when totaled show the amount received and amount paid out, but are not made equal by adding in the balance.

Illustration of Simple Cash Book with Constant Balance.

1922		ITEMS	RECEIPTS	PAYMENTS	BALANCE
Nov...	1	Balance (bank $250, purse $25.50)			275.50
	1	Rent		40.	235.50
	1	Food		60.	175.50
	1	Salary	400.		575.50
	30	Brown Co. Clothes for C.....		32.	543.50
		Totals for month.....	400.	132.	
Dec...	1				

Special columns for bank record.—A record of that part of one's money which is in one's checking account at the bank is easily added to any of the columnar cash books by lettering three special columns for "Bank deposits," "Bank withdrawals" and "Bank balance," which is a useful device under some circumstances. The "constant balance" column shows, as one enters bank deposits and makes withdrawals, how the bank balance is affected by each transaction. These headings are illustrated herewith. In using such a bank record the receipt and payment columns of the cash account should include all payments and all receipts whether in actual money or by checks, and then there are repeated in the three banking columns the items that affect the bank account only. The totals of the "receipts" and "payments" columns gives one his com-

Illustration of Cash Book with Special Bank Record.

DATE	ITEMS	ALL RECEIPTS	ALL PAYMENTS	BANK DEPOSITS	BANK WITHDRAWALS	BANK BALANCE
1921						
Nov.	1. Balance	275.50				250.
	Rent (by check)...		60.		60.	190.
	Food (by check)...		40.		40.	150.
	Salary	400.		400.		550.
	2. Cash check				100.	450.

plete record of all cash; the bank record covers simply one's relations with the bank in making deposits and withdrawals; and the bank balance column indicates the present balance in the bank account.

Some one of the above forms of Cash Book will provide the record of cash receipts and payments; there is next to be presented the Household Ledger for property and debt records, then procedures for budgeting family income.

Household Ledger—Property and Debts [1]

Capital accounts—Records of property and debts.—In distinction from income and expenditure items which go into the Cash Book as just outlined, there is also the relationship of the household to its more or less fixed property owned, and to its more or less fixed debts owed. Accounts of property and debts are called capital accounts and because of the periodical comparison of these accounts in the balance sheet are also called balance-sheet accounts. Such accounts go into the Household Ledger. The distinction between income accounts and capital accounts may be illustrated in terms of a piece of real-estate. Rent receipts and payments for taxes, usual repairs, insurance, etc. which occur year after year and which represent the income and outgo from property held would go into the income and expense accounts, or the receipts and payments, of the cash book. But there would be needed elsewhere a capital account showing the amount once for all invested in the house—say $8000—and if a $2000-addition to the house were built, this also would go into the capital account to show that the investment had increased to $10,000. Similarly, if at the end of a year, one estimated that the house had decreased in value by $100, an entry of "depreciation $100" should be entered in the capital account. Evidently the last item is op-

[1] A memorandum or incomplete ledger system is here presented, sufficiently complete to give permanent records of property and debts and to serve as basis of an annual balance sheet of the householder. For more complete discussion, see Bentley, H. C., *Science of Accounts.* Ronald, New York, 1911, and Rittennouse, *Elements of Accounts,* pp. 53-102.

posite in nature, a decrease in the investment value as compared with the original purchase price of $8000 and the added investment of $2000. Convenient to this distinction, account book forms present always two columns or two sides for entering items of these opposing tendencies of increase and decrease in the value of property or of debts. The so-called "Journal" page is ruled with two money columns at its right margin, a left or debit column and a right or credit column; the "Ledger" page is divided into a left half (debit) and a right half (credit). A book of 500 pages 6 x 9 inches of journal ruling or of somewhat larger pages of ledger ruling, makes a good permanent "Personal or Household Ledger."

On a page of such a book, any particular property or debt record is opened by writing in an appropriate heading, at the top of the page, with descriptive items and the sums of money concerned. With accounts of property or "assets" or "resources" the entry of original value and of all increases of value are put in the left or debit column or side, and of all decreases of value are put on the right or credit side. With accounts of debts or "liabilities" this relationship is reversed: the original entry of the liability goes on the right or credit side, and decreases of the liability on the left or debit side. In both asset and liability accounts the entries in the given account are periodically added on the debit side and on the credit side and the totals of debts and of credits in each account are compared, or "balanced," by subtraction, and the balancing item written in the account to represent the present amount of the asset or the liability. It is this present value or balance item which is taken into the balance sheet and helps there to determine that most significant question "How much are we now worth above our debts?"

Typical property or asset accounts.—A *house capital account* as discussed above is a typical property account and it appears in the Household Ledger on a page with a heading, as below, and with debit (left side) entries of the original investment and increases in it, and with credit entries (right)

of decreases in the value; and with a debit balance indicating present value.

HOUSE NO. 201 JACKSON STREET (CAPITAL ACCOUNT)

1920			1920		
Jan. 30	Purchased	$ 8,000	Dec. 31	Depreciation	$ 100
Aug. 1	Addition	2,000	Dec. 31	Present value....	9,900
		$10,000			$10,000
Dec. 31	Present value....	$ 9,900			

In taking a balance sheet of all one's property and one's debts December 31, 1920, the house is entered at $9900, which is the balancing item of that date in the House account (capital). Items of income and expense arising in connection with the house do not go into the capital account just outlined, but in a "House (201 Jackson Street) Income and Expense" account in the Ledger to which cash transactions of income and expense may be entered from the Cash book.

The depreciation item of $100 which appears as a decrease in the capital value of the house, has also an expenditure quality and must be counted in the ledger "House (201 Jackson Street) Income and Expense" account in the complete list of the costs of owning the house for the year.

A separate ledger account (capital account) for each piece of real estate owned, and bearing its name, is necessary; also a separate income and expense account for each such property.

Cash surplus.—The Household Ledger should carry a record of the cash surplus or reserve which has been definitely set aside from the current checking account; the varying balance in the checking account will not be considered with this. The Savings Bank balance is part of this surplus and may be counted as an item in it, or may be put in a separate ledger account called "Savings Bank account" with a record of deposits, interest additions (since they increase the surplus), and withdrawals. The original entry in the Cash Surplus

will be on the debit or left side, similarly any increases; but decreases in the Cash Surplus as it is drawn upon, perhaps, to buy a bond, require a credit (right side) entry; at the same time a debit (left) entry is made in the securities account (see below) for the bond purchased.

Life insurance as an asset should be entered under this heading, with a memorandum of the company, face of the policy and its number, date and amount of premium and where payable. The asset value to be entered is not the number of dollars in the face of the policy but the present cash surrender value of the policy and this should be increased year by year in the Life Insurance ledger account from the table in the policy as indicating its present value. This gives a more accurate asset item than to enter in the insurance capital account all premiums paid year by year, or to enter the face of the policy. If a policy is taken up, a credit (right) entry will cancel out its cash surrender value.

Securities, such as bonds and stocks, may be entered at their purchase price on the debit (left) side of a "securities account"; when bonds are redeemed at maturity, or when bonds or stocks are sold, an entry will be made on the right (credit) side of the amount actually received; if there has been a gain, enter the amount on the debit (left) side as "gain on—$—," if a loss, enter that on the credit (right) side, as "loss on —$—" so that the purchase price of the item will be exactly cancelled out of the debits, and the debit items remaining will represent purchase price of securities still held. Elsewhere in the Cash Book an income account should be kept for "gains and losses on securities" with one column for gains and one for losses. Interest on bonds and dividends on stock owned will of course also be put in the Cash Book in an "income from securities" column; with a corresponding "Expense for Securities" column for entering commissions paid. Or, accounts may be opened in the Ledger for "Securities—Gains and Losses," and "Securities—Income and Expense."

"*Notes receivable*"—that is, loans made to others secured by

a note—should be entered in a ledger account, called "Notes Receivable," under date received, name of drawer, date due, etc. The amount of the note should be entered on the debit (left) side; any part or complete payment of a note will go on the credit (right) side; interest receipts on notes held will not be entered in this Ledger account but go into the Cash Book, in a special receipt column if important enough, as Interest. For instance, if a new note is accepted for an old one, an item on the credit (right) side cancels out the original entry, and an entry of the new note is made on the left side. If "mortgages receivable" are owned, a separate account should be provided for them under that title. If any loss of principal occurs on notes or mortgages, the amount actually received in settlement can be entered on the credit (right) side, and also the amount of "loss," so that these two amounts together cancel out the face of the note or mortgage on the debit (left) side.

Building lots owned should be carried in a separate account for each parcel, as "Building Lot—126 A. st., B.—N. Y."; a debit entry is made of the original purchase price and of all carrying and development charges until the lot is sold or utilized, as purchase fees, taxes, assessments, surveys, initial improvements—all represent increments in an original investment; if part or all is sold, enter the selling price on the credit (right) side. If there is a profit enter the amount of it on the debit (left) side; and if a loss, the amount of it on the credit (right) side, so as to exactly cancel out of the account the entry representing the investment in the part sold. The balance then represents the investment in the unsold parcels. When the property comes into use, this account is treated like the house account above, and all income and expense items go through the Cash Account, except betterments which increase the debit items in this capital account.

Personal property, as furniture, automobile, etc., can be entered in appropriate individual capital accounts and so for any kind of property, or any special item of property, by mak-

ing an appropriate heading on a separate page in the Household Ledger and entering a brief description of the property and its value on the debit (left) side of this account. Increases go on the same side; decreases on the credit (right) side. The balance between the two sides of a property account is always on the debit (left) side and represents the present value of the property or asset which is the amount used in making up the Balance Sheet.

Typical debt or liability accounts.—Debt or Liability accounts of more or less permanent debt relationships are entered in individual liability accounts in the Household Ledger bearing the name of the kind of debt or of the individual debt to be recorded. In a liability account the entries are the reverse of the entries in property accounts; the original entry of the debt goes in the right column or on the right side of the account (credit side); increases in the debt similarly; while decreases of the debt by payment or otherwise go on the left (debit) side. Any balance unpaid on a debt appears therefore on the right (credit) side, and these credit or liability balances in the various liability accounts are the items transferred to the Balance Sheet in making periodical comparisons of property owned and debts owed in order to discover the net worth on a given date.

Debt or liability accounts include chiefly "Notes Payable" and "Mortgages Payable" accounts, and pages with these headings will be set aside in the Household Ledger. When one gives a "note" or formal promise to pay an amount of money at a certain date, one should enter the facts in a "Notes Payable" account with the amount of the note entered on the credit or (right) side; when the note is paid in whole or part an entry is made on the debit (right) side; the balance of this account indicates the amounts still to be paid on outstanding notes.

A "mortgages payable" account is handled similarly; the original entry of the debt for money borrowed on the mortgage is made on the credit (right) side, and payments are entered on the debit (left) side; the balance is always on the

credit (right) side and indicates the amount still to be paid on outstanding mortgages. Mortgages are so important that a separate account for each mortgage payable is desirable.

Accounts payable at stores will not be entered in the Household Ledger, but the total due can be had from bills, etc., or from the "charged column" of the cash book, for entering in the Balance Sheet.

A special debt or liability account can be opened for any liability by entering under an appropriate heading the description of the debt with its amount on the credit (right) side and decreases in it on the debit (left) side; the balance between the two is always on the credit (right) side and represents the present amount due on the debt or liability which is the figure to be carried into the list of liabilities of the Balance Sheet.

Annual balance sheets.—One of the most significant pieces of household accounting is the taking of the annual balance

ANNUAL BALANCE SHEET OF RESOURCES AND LIABILITIES, TAKEN ON DEC. 31, FOR EACH YEAR:—

	1920	1921	1922	1923	1924
(A) Resources, assets or property					
Cash in bank or purse	440	600	500		
Cash reserve and savings acct.	560	800	1,200		
Bonds	1,800	2,000	2,500		
Home	7,200	7,100	7,000		
Life insurance (surrender value)	3,000	3,300	3,600		
Other assets	13,000	13,800	14,800		
(B) Liabilities or debts					
Accounts at stores	100	50	100		
Mortgage payable	2,400	1,950	1,500		
Notes payable	....	100	....		
	2,500	2,100	1,600		
(C) Net worth or capital					
Total resources (A) minus total debts (B)	10,500	11,700	13,200		
(D) (a) Annual increase in net capital	....	1,200	1,500		
(b) Annual decrease in net capital					

sheet of assets versus liabilities in the form already indicated. This should be entered in the Household Ledger in such form that a comparison of the net worth year by year is possible, to show how much progress is made in increasing one's net worth year by year. A table like the preceding with columns for the balance sheet of successive years and with as much of detail as possible in the lists of assets and of liabilities is desirable. If a memorandum ledger, at least, is kept the annual balance sheet can quickly be taken.

Budgeting and Family Finance

Getting on a budget plan.—The plan of spending will vary in every family; it is to be made by considering one's needs and one's resources for meeting those needs. One practical way to begin is to list all the facts available as to last year's or last month's spending and saving, as shown by check book stubs, receipted bills, and other records available, and to arrange these facts systematically (column I of form opposite). Then go over the record critically and make a written plan for the saving and spending for the ensuing similar period of time (column II, opposite); then keep written records of spending during this period which can be analyzed as they occur and at the end of the period compare them with the budget plan made in advance (column III, opposite). Out of this comparison there can then be made a new budget for the next ensuing period (Column IV, opposite). The procedure is graphically shown in the following schedule which will serve practically to assist anyone wishing "to get on a budget" (p. 547).

Standard budgets an aid.—The budget of a certain family or individual must be worked out for the particular family or individual so that it will express their needs and circumstances. Standard budgets which may be either averages of actual expenditures, or estimates of what well balanced expenditures might be, may however serve as helpful aids in discussion and in personal planning.

	I. AMOUNTS LAST WEEK, OR MONTH, OR YEAR ENDING ———	II. PLANS FOR NEXT WEEK, OR MONTH, OR YEAR ENDING ———	III. ACTUAL AMOUNTS FOR THIS PERIOD ENDING ———	IV. THE NEW BUDGET FOR ——— ENDING ———.
Income or earnings per week, or month, or year	$.....	$.....	$.....	$.....
Savings (to be made in advance of spending)	.....	.....	.....	.....
Reserve for life insurance premiums	.....	.....	.....	.....
Reserve for income tax payments	.....	.....	.....	.....
Amount left to spend (income less savings, insurance and taxes)	.....	.....	.....	.....
Expenditures:				
Rent or house expense (taxes, interest, fire insurance, repairs)	.....	.....	.....	.....
Food	.....	.....	.....	.....
Clothing	.....	.....	.....	.....
Housekeeping expense (heat, light, telephone, laundry, wages, repairs and upkeep, etc.)	.....	.....	.....	.....
Personal expenses:				
Church and charity	.....	.....	.....	.....
Education, reading, etc.	.....	.....	.....	.....
Health	.....	.....	.....	.....
Recreation	.....	.....	.....	.....
Personal, miscellaneous	.....	.....	.....	.....
Total personal expenses	.....	.....	.....	.....
Total amount spent	.....	.....	.....	.....
Surplus left after spending to add to savings	.....	.....	.....	.....
Total savings (made in advance, "surplus after spending," life insurance, etc.)	.....	.....	.....	.....

Among helpful standard estimates for spending by families, and by individuals, are the following Thrift Budgets of the Savings Division, United States Treasury Department.[1]

FAMILY THRIFT BUDGETS. $1200 TO $5000 A YEAR.

$1,200 A YEAR—$100 A MONTH.

	Number in the family			
	Two	Three	Four	Five
Savings	$ 10.00	$ 7.00	$ 5.00	$ 3.00
Rent	16.00	16.00	16.00	16.00
Food	27.00	34.00	41.00	48.00
Clothing	13.00	14.00	15.00	16.00
Housekeeping expenses	10.00	9.00	8.00	7.00
Church, charities	6.00	5.00	3.00	1.00
Health, recreation, education	10.00	8.00	6.00	5.00
Personal, miscellaneous	8.00	7.00	6.00	5.00
Total for month	$100.00	$100.00	$100.00	$100.00

$1,800 A YEAR—$150 A MONTH.

	Number in the family			
	Two	Three	Four	Five
Savings	$ 27.00	$ 21.00	$ 15.00	$ 10.00
Rent	20.00	20.00	22.00	22.00
Food	37.00	44.00	51.00	58.00
Clothing	20.00	20.00	21.00	22.00
Housekeeping expenses	11.00	12.00	12.00	12.00
Church, charities	10.00	9.00	8.00	7.00
Health, recreation, education	12.00	12.00	10.00	10.00
Personal, miscellaneous	13.00	12.00	11.00	9.00
Total for month	$150.00	$150.00	$150.00	$150.00

[1] Mrs. Alice P. Norton, editor of *Journal of Home Economics,* was chiefly responsible for the compilation; she was assisted by S. Maria Elliott of Simmons College. The budgets were originally published in *How Other People Get Ahead,* Savings Division, U. S. Treasury Department, and were prepared under the direction of the author who had previously published a set of standard budget estimates in the *American Magazine,* January, 1919. They are reprinted in "The New American Thrift" (*Annals of the American Academy of Social and Political Science,* Jan., 1920), in an article by the author on "Thrift as a Family and Individual Problem."

$2,400 A YEAR—$200 A MONTH.

	Number in the family			
	Two	Three	Four	Five
Savings	$ 50.00	$ 41.00	$ 31.00	$ 21.00
Rent	25.00	25.00	27.00	27.00
Food	40.00	48.00	56.00	64.00
Clothing	22.00	25.00	28.00	30.00
Housekeeping expenses	18.00	20.00	20.00	20.00
Church, charities	15.00	12.00	11.00	11.00
Health, recreation, education	14.00	14.00	13.00	13.00
Personal, miscellaneous	16.00	15.00	14.00	14.00
Total for month	$200.00	$200.00	$200.00	$200.00

$3,000 A YEAR—$250 A MONTH.

	Number in the family			
	Two	Three	Four	Five
Savings	$ 68.33	$ 56.66	$ 43.00	$ 32.00
Taxes (Federal income)	1.67	.34	....	....
Rent	30.00	30.00	35.00	35.00
Food	40.00	48.00	56.00	64.00
Clothing	30.00	33.00	36.00	39.00
Housekeeping expenses	25.00	30.00	32.00	32.00
Church, charities	19.00	17.00	16.00	16.00
Health, recreation, education	18.00	18.00	16.00	16.00
Personal, miscellaneous	18.00	17.00	16.00	16.00
Total for month	$250.00	$250.00	$250.00	$250.00

$5,000 A YEAR—$416.66 A MONTH.

	Number in the family			
	Two	Three	Four	Five
Savings	$132.32	$112.66	$ 98.00	$ 84.32
Taxes (Federal income)	8.34	7.00	5.67	4.34
Rent	50.00	50.00	60.00	60.00
Food	45.00	55.00	65.00	75.00
Clothing	45.00	50.00	55.00	60.00
Housekeeping expenses	50.00	60.00	63.00	65.00
Church, charities	36.00	33.00	27.00	25.00
Health, recreation, education	25.00	25.00	22.00	22.00
Personal, miscellaneous	25.00	24.00	21.00	21.00
Total for month	$416.66	$416.66	$416.66	$416.66

INDIVIDUAL THRIFT BUDGETS $15 A WEEK TO $1,800 A YEAR.

$15 A WEEK, OR $65 A MONTH, OR $780 A YEAR.

	A week	A year
Savings	$ .25	$ 13.00
Room and board	8.00	416.00
Lunches	1.50	78.00
Carfare to business	.60	31.20
Clothing	3.00	156.00
Laundry	.45	23.40
Church, charities, gifts	.20	10.40
Health, recreation, education	.75	39.00
Miscellaneous	.25	13.00
Total	$15.00	$780.00

$17.30 A WEEK, OR $75 A MONTH, OR $900 A YEAR.

	A week	A year
Savings	$ 1.00	$ 52.00
Room and board	8.00	416.00
Lunches	1.50	78.00
Carfare to business	.60	31.20
Clothing	3.50	182.00
Laundry	.50	26.00
Church, charities, gifts	.50	26.00
Health, recreation, education	1.00	52.00
Miscellaneous	.70	36.40
Total	$17.30	$899.60
Extra savings	....	.40
		$900.00

$23.08 A WEEK, OR $100 A MONTH, OR $1,200 A YEAR.

	A month	A year
Savings	$ 12.33	$ 148.00
Federal income tax	.67	8.00
Room and board	40.00	480.00
Lunches	8.00	96.00
Carfare to business	2.60	31.20
Clothing	16.75	201.00
Laundry	3.25	39.00
Church, charities, gifts	4.40	52.80
Health, recreation, education	8.00	96.00
Miscellaneous	4.00	48.00
Total	$100.00	$1,200.00

$34.60 A WEEK, OR $150 A MONTH, OR $1,800 A YEAR.

	A month	A year
Savings	$ 31.33	$ 376.00
Federal income tax	2.67	32.00
Room and board	45.00	540.00
Lunches	11.00	132.00
Carfare to business	2.60	31.20
Clothing	25.00	300.00
Laundry	4.00	48.00
Church, charities, gifts	10.00	120.00
Health, recreation, education	12.00	144.00
Miscellaneous	6.40	76.80
Total	$150.00	$1,800.00

Percentage budgets.—The following percentage budgets for a family suggest the shifts in costs for different items as income increases—the food percentage falls, and other items tend to increase particularly personal expenditures. The amounts mentioned are the net sum in round numbers after income taxes are paid. The larger the income the more indeterminate the distribution is.

APPROXIMATE PERCENTAGE BUDGETS FOR DIFFERENT INCOME LEVELS.

INCOME LEVELS	SAVINGS AND INSURANCE	FOOD	SHELTER	CLOTHING	HOUSEKEEPING	PERSONAL
Minimum standard ($1,200–$1,500)	1–3%	40–45%	16–17%	12–13%	10%	11–15%
Comfort standard ($1,800–$2,200)	2–4	35–40	18	13–15	12	16–20
Moderate standard ($2,500–$5,000)	3–6	30	18	15–17	14	18–22
Liberal standard ($6,000–$20,000)	6–15	20–25	20±	17–18	15±	25±
Super-Liberal ($25,000 upward)	10–25	15–20	20±	18–20	20±	25±

Ellen H. Richards's *Ideal Budget*, suggested in 1900 for the family of five with a moderate income above the workingman's income level, may be quoted as a useful rule: food, 25

percent or one-fourth; rent, 20 percent or one-fifth; clothing, 15 percent or about one-seventh; household operation, 15 percent or one-seventh; and higher life expenditures, 25 percent or one-fourth.

American minimum budget.—The following division of the workingman's budget, based on averages of a number of budget studies, has been used in estimating price fluctuations by the National Industrial Conference Board: food, 43.1 percent; shelter, 17.7 percent; clothing, 13.2 percent; fuel and light, 5.6 percent; sundries, 20.4 percent. These figures represent a minimum standard rather than the comfort standard discussed in an earlier chapter.

Standardized spending habits.—Experience indicates that habits of spending become established in more or less standardized form, and hence that budgeting becomes automatic, so that one can undertake formal budgeting and account keeping with the idea of establishing standards and later habit will provide the control desirable. The young couple starting housekeeping, and all others who face unknown economic adjustments—the newcomer in a community, the inexperienced traveler or vacationist, and every one at times of rising and falling prices, or of increase and decrease in income—can help themselves to make the necessary adjustments by drawing up a written budget and by keeping written classified accounts, for a time at least. So those who do not regularly keep accounts will find an occasional month's accounting with criticisms of their results a financial tonic. So, too, the keeping of partial accounts, as of food expenses for a month or so, with criticism of food costs, will help control this largest item of outgo. Habit enables one to face unchanging conditions, but the essence of life is change and progress, and a periodical survey at least of the family's use of money will yield results in increased satisfaction.

Partnership in family finance.—Centralized control of household expenditures is probably the common situation, with money matters largely in the hands of one person—either the

husband or wife. Historically, the husband controlled money; today there is a tendency for the wife to act as disbursing agent, but with money control exercised in a democratic way by conferences and discussions between husband and wife in which in progressive families even the children participate. Centralized control in some form is desirable for making spending well-balanced between different present needs; proportioned to needs of the future as well as the present; proportioned between the different members of the family according to the needs of each.

Money in use makes character. At two points we might improve the ethical influences of money; viz., (1) in the relations between husband and wife and the family purse; and (2) in the intelligent handling of children in their relation to money.

We regulate by law the control and disposal of family property in the event of the death of either adult member of the family. We have defined somewhat by law money relations within the family. What we need, however, are social standards—personal and ethical at basis, not legal—which shall tend not only to even-handed justice in such matters, but shall establish the finances of the family, as indeed the whole family life, upon a basis of equality, a consideration of each for the others as equal in right, privilege, and responsibility. The law now protects the wife in an income which she earns or receives in her own name, and in the ownership and disposal of her property; it provides in most states that the household expense is a charge upon the husband; and in some states the law takes fairer ground in making both jointly liable for family expense—and this is doubtless the ultimate legal goal as it is the economic fact. Such provision of equality before the law has been reached only by a half-century of earnest effort for women's rights, and at many points effort is still needed. Legal provision, however, can never shape the daily life of the household; the intimate life of every day is cast in terms of personal purpose, attitude, and will, and can be placed on a just plane only as a regard for equal rights governs the in-

dividuals in the home. What should be items in the personal standards of a family regarding its finances?

1. Let the man recognize that his earnings, so-called, are returns made to the partnership, and not to him alone, for work done. Income is determined by efficiency, and the home contributes not only food and shelter, but courage for work, and satisfaction in it; the home is the impulse to industry. The man's earnings in a real sense are the home's earnings.

2. It is dishonesty to the facts to say, "I will keep this much or that much for myself and the rest belongs to the home." All belongs to the home and the man's share for personal spending cannot in right take precedence over the shares of other members of the family.

3. The family-purse is to be a partnership fund held in common, and its distribution among various objects of expenditure is to be a matter of joint consideration and decision. This is a standard which, generally adopted, would tend to greatly increase the satisfaction and comfort of living. It is the only fair standard.

4. Such a plan may be carried out by the workingman who turns his pay envelope over to his wife, but who also shows a readiness to help with financial counsel or with actual disbursements; similarly, by the professional man, whose salary goes into a bank account open equally to checking by wife and husband; and by the business man who withdraws from his business income the sum determined upon for family expenses and places it under joint control.

5. In making plans for a home of their own, a man and a woman can do no one thing which will more insure its success than by adopting the principle of the common family-purse and its administration in a democratic way. The adjustment of personal habits and points of view as regards finance to a common plan of action, jointly determined, may well be the first expression of abiding ethical and personal unity. Agreement in financial relationships will react in agreement in all their living.

6. The wife should recognize her responsibility as controller of the family purse by making herself competent; yet she should exercise her responsibility not arbitrarily but by securing family consideration for more important decisions.

7. Family consideration of financial matters can best be given by making a budget for the general planning of expenditures and by keeping written accounts of income and expenditure and of property.

8. Children should participate intelligently in family financial problems as soon as practicable both for their aid in its control and for their own development.

Household finance practice.—Of 47 New York women, members of women's clubs (1921), 42 gave their experience with household finance as follows (The report of so small and selected a group has no general value; it does suggest certain problems worth further study):

Household accounts: Four had never kept household accounts, 21 had always kept such accounts, and 17 had done so occasionally. Thus, 38 out of 47, or more than ¾, kept household accounts, and 3/7 of all (one-half of those reporting) had always kept household accounts.

Of these 38 keeping accounts, 4 kept them in unclassified form, and 32 kept classified accounts showing totals spent for food, clothing, and other items; 14 made up a monthly summary table to compare totals of outgoes; 13 made written spending plans in advance of spending, that is, they were carefully budgeting their money—hence more than one in four of all these families and one in three of those giving their experience with household accounts are on a budget system. Another family which had not kept a budget reports that nevertheless "our account shows a close agreement from year to year."

The question of whether it is necessary for the person keeping household accounts periodically to balance her recorded accounts accurately with the cash on hand is an old one. Of the 38 keeping accounts, 17, or nearly half, "carefully balance

their cash." As to the value of accounts, 19, or one-half of those keeping accounts, report that accounts help them to save money; 6 who had kept accounts gave them up as not worth while.

Allowances: Eleven families, or about 1 in 4, reported that they handle family finance by setting aside a certain sum for saving before beginning their spending; 24, or one-half the families, used the plan of setting a definite limit to the amount to be spent for housekeeping expenses; in 15 families, or 1 in 3, a monthly limit is placed on the monthly food cost; in six families a personal allowance was set for both husband and wife; in two families an allowance was set for the husband alone; and in two others for the wife alone—making a total of ten families, or 1 in 5, in which a personal allowance for either husband or wife or both was used. In five families, allowances for children were reported, but this measure is not accurate, as the number of families having children was not stated; hence in certainly more than one in ten of the families with children, children's allowances were given.

Money for housekeeping: In 20 families (40 percent), the husband provides a regular weekly sum for housekeeping expenses; in 10 cases (20 percent) the husband on request furnishes money for this purpose. As stated above, in 24 cases, or half the families, the amount for this purpose is definitely determined as a limited sum available for housekeeping; in 15 of these 24 the amount is both determined in amount and provided regularly by the husband, so that it is available for use—in other words, there is a tendency, when a definite amount is determined upon for housekeeping, to provide this sum regularly rather than to hand out money on request. Of the families which both set a limit and set aside money for housekeeping, two-thirds reported also that money matters were a joint responsibility between husband and wife rather than being handled exclusively by either one. Such a situation approaches a good working plan—husband and wife cooperating in spending plans, a limit being set to the larger

items as of food and the money being made available for the managing-spender.

Paying bills: Thirty-one of the 47 families paid cash "as far as we can"; 5 "charge as far as we can"; of the 47 families, over three-fourths have checking accounts.

In 17 of the 47 families, the husband's checking account is used wholly or in part to pay monthly bills, and in 8 of these the husband's account seems to be the sole method of drawing checks; in 13 cases there is a joint bank account; in at least 15 cases, the wife had a separate household or personal checking account (not including joint accounts); and counting the 13 joint accounts and two others using their own checks there were at least 30 of the 47 housewives using checking accounts. Adding the eight cases where the husband's account is used, at least 38 of the 47 families use checks to pay monthly household bills. At least 20 housewives of the 47 regularly draw some of the checks to pay monthly bills, and 12 of these, or one-fourth of all, apparently draw all checks for housekeeping bills.

Responsibility for money-planning: One person, either husband or wife, may carry the larger responsibility for money planning; or the planning may be borne jointly between husband and wife. In these 47 families, 40 gave answers as follows: Husband takes larger responsibility, 4; wife takes larger responsibility, 16; joint responsibility of husband and wife, 20. These facts do not support the suggestion sometimes offered that the wife has taken over sole control of spending in moderate income families; rather, they support the ideal advanced that the American family is a financial partnership in which both man and woman share the control. Five families reported that the children share in money discussion, so that at least one-eighth, and probably a larger part, of families follow this commendable practice.

Training of children through family finance.—Household resources should be handled so as to create educational values for all concerned, but especially for children and young

people. The central method to this end is the cooperative consideration by the family group of problems of spending and saving—not, of course, in their cold financial aspects, but in their possibilities for richer and more varied satisfactions.

There are special methods, already described, of aiding in children's development: the child's own savings and start-in-life fund; the allowance wisely supervised; the earning of money by unusual household tasks and by productive enterprises about the home; and definite plans, as regular wage-earning begins, for taking on a part and ultimately all of self-support, even while at home, and at the same time for making large additions to the personal savings fund.

Young people should be encouraged gradually to make an economic plan of life covering vocational choice and training, saving, property, business prospects, recreation, home standards, marriage, choice of later place of residence, home ownership, life insurance, and the like. It is well to encourage a boy or girl to have a financial plan and record book that will eventuate into a personal and family ledger, for records of property, summaries of receipts and expenditures, and other financial memoranda.

Parents can readily give their children experience with the more common financial institution and business relations by having them make contact with the savings bank account; postal savings; building-loan-association shares; checking account with depositing, checking, balancing; government savings stamps and bonds; purchase of one or more bonds, and possibly one or more shares of stock; rental of land for a garden; hiring out to do certain tasks; hiring another to work; buying from the simple experience of the grocery order up to buying clothing, house furnishings, and more responsible undertakings; selling of junk, produce, newspapers, etc.; fire insurance; borrowing on a note; making a contract; loaning on a mortgage.

The start-in-life fund should be saved for vocational education and for starting a home. The girl and young woman equally with the boy and young man should have such a fund,

and should also accumulate personal property, furniture, rugs, pictures, etc.—to constitute resources in making the start in life. Home-building should be a more conscious aim, as it was in earlier generations in America, in the sense of looking forward to the making of a home. The child in the home should become conscious of the worth of a home to himself and of the significance of parents to children and children to parents, and should in a natural way look forward to the making of a home of his own and should appreciate the economic problems involved.

What economic ideals as to marriage should the home inculcate? The dependence of any home upon wage-earning by the man and efficient housekeeping by the woman should be made plain. So, too, the necessity of saving for the initial expenses, that guarantees the fair start, and for a reserve fund, that guards against emergencies; yet avoiding the over-cautious spirit that postpones marriage too long as much as the lack of prudence that rushes into a hasty union without adequate economic resources.

More important than financial resources, however, is the spirit of equality, of democratic partnership, of common counsel in the housekeeping and homemaking within the home and in the larger problems at least of the man's business outside the home. This it is that leads the two who would make a modern home to face as one the problems of life as they arise—whether in economic matters, in social relationships, or in the personal adjustments on which successful family life so largely depends. The high adventure of working out, in the next generation, happy and socially useful homes will be achieved best by these young people whose parents are now training them to select and reject, not only for their own development but for the best interests of the family group to which they now belong.

General summary.—We have considered now some of the problems which are of general or social interest in the business of housekeeping and homemaking. The household institution

carries most important functions in race-continuance, in the maintaining of the individual, and in the development of personality. The economic relations of the household were found to involve in basic ways all three economic processes of production, distribution, and consumption. The economics of the household was analyzed in terms of household income, savings and the creation of household capital, and household expenditures. Household income was shown to be more than money received: it involves the contributions made by the housewife's labor and management and that of other members of the family; it involves the equipment of household capital for productive household work and for the processes of direct enjoyment or economic consumption in the home; it involves all that social income of goods and services which the community contributes to the life of the family. The wise expenditure of the "real income" comprises not only all the possibilities of satisfaction and attainment of culture for the individual family, but also its opportunity to serve society. In handling money income a thoughtful facing of present and future needs was urged as the first step, with the assignment of adequate savings to provide for future emergencies and future opportunities of a general nature, and also for specific goals only to be reached by definite saving; a savings wage for all and universal thrift were advocated as a rational program.

Expenditures for family needs were found to comprise problems both of an individual and a social character—as regards food, clothing, shelter, housekeeping, and the provision of the cultural satisfactions of life—and methods of handling household resources in order best to secure these satisfactions from expenditure have just been discussed.

The household, we have seen, is the personal institution, the larger self in terms of which we pass ourselves on down the generations, and whereby, while we are here, we not only maintain ourselves in terms of economic relationships, but also develop and enrich our personalities in terms of the social

relations about the holy hearth, and from its small circle expand to that of town and state and the world.

With all the control of modern life—by industry, by law, by church, and by school—the family is a blessed isle of freedom, where the individual life is nurtured for itself and in social relations, and where men and women can be produced who will stand four-square to life as friendly, cooperative, self-dependent, loyal, unselfish and productive human beings. A race that can produce homes that even moderately express this ideal can look forward hopefully to the future. The family with all faults acknowledged is still the one most satisfactory item in human experience.

ADDITIONAL REFERENCES

ANDREWS, BENJAMIN R. *A Survey of Your Household Finance, Teachers College Bulletin,* 1914.

CRANDALL and CRANDALL. *A Manual of Household Accounts.* Boston, Whitcomb and Barrows.

DONHAM, S. AGNES. *Spending the Family Income.* Little Brown, 1921.

LORD, ISABEL ELY. *Getting Your Money's Worth.* Harcourt Brace, New York, 1922.

RITTENHOUSE, C. F. *Elements of Accounts for Professional Man and Institutions.* McGraw-Hill, 1918.

TABER, C. W. *Business of the Household.* Lippincott, 1922.

———. *Household Ledger and Family Budget.* 2126 Prairie Avenue, Chicago.

APPENDIX

PROBLEMS IN HOUSEHOLD ECONOMICS

Problems and topics for investigations are suggested below, some to be assigned to individual students, some to be undertaken by a committee or a group of students or by the whole class. Some problems require the student to examine his or her own experience, and much that the individual has experienced offers the very best basis for a consideration of related problems in the economics of the family group. Some problems call for reports on the facts regarding their parents' households; with older students it is fair to expect a detached impersonal attitude in such reports and this can be stimulated by requiring written reports to be given under a code number assigned the student rather than by personal name. Sometimes facts can be secured by written requests to parents; still better are observational studies made at home during vacations, and with advanced students in other homes that will cooperate. Contacts can be made by instructors with at least a few homes, such as those of home economics alumnæ, which will serve as occasional laboratories and observation stations for class problems. The institution in which the class itself is located will yield problems, particularly if dormitories and lunch rooms are conducted. The local community and those from which students come will yield an unexpected wealth of problems if a canvass is made of the social agencies, the public institutions and the business enterprises that are related to the home. From these and other fields the instructor can gradually collect problems which are adjusted to the particular needs and possibilities of the class. The problems below are arranged in groups under the general subjects treated in the text and students will do well to read through the whole set of questions in connection with the study of any chapter of the text, as well as to consider in detail problems particularly assigned to them.

Problems on Economics of the Household

1. Outline the place of general economics in education for the home.

2. Get a clear idea, by means of household illustrations and by reference to definitions, of the following economic terms: Wealth, value; utility—of form, of place and of time; want; economic consumption; economic distribution; labor and wages; capital and interest; land and rent; enterpriser and profits; competitive profits; monopoly and monopoly profits; market, supply, demand, price, normal price, market price.

3. Outline principles of economic consumption and illustrate each in terms of the household.

4. Show connections between the following general economic problems and the household: trust, monopoly, tariff, money.

5. Just what is the nature of economic "work"? Does this term apply to the household?

6. "The profession of homemaking." What is a profession? Is homemaking an art, a science, a vocation, an avocation, a profession? (See dictionary.) Is it always the same?

7. What seem to be the goals of the home economics movement? Is it exclusively or predominantly concerned with eugenics? or euthenics? List its aims.

8. Mention five important questions regarding the household. Which are economic?

9. Show that the following are economic problems of the home: a servant scrubbing a kitchen at 9 p. m.; a death from tuberculosis; shoe soles worn through in five weeks. List other household economic problems.

10. Examine several examples of economic reform legislation. Which have any influence upon the household?

11. Collect popular maxims that have reference to the household, such as "Two can live as cheaply as one"; "No roof can shelter two families"; "When you are old it is well to put your feet under your own table." How do such sayings get started? Are they a kind of inheritance of the results of race "research"? Need they be entirely or always true? Attack or support one of the sayings quoted.

12. List the institutions and agencies carrying on research and investigation that may make contributions to an economics of the household (scientific, commercial, industrial, educational, governmental, etc.).

13. It is proposed to establish State Household Experiment Stations as part of each State Agricultural Stations. List ten topics, aside from foods, worth studying in such a station. Assuming yourself to be director of such a station, make a detailed plan for studying one of these problems.

Certain daily and monthly magazines conduct housekeeping experiment stations for examining apparatus and equipment; just where might the influence of such a bureau make itself felt?

14. "Educational research discovers new ways of applying truth to the service of life and making it available for the education of the masses." (See F. G. Bonser, *Teachers College Record*, June, 1920.) Illustrate this idea by economic items in an improved course of study in household arts for high schools.

15. List all the natural sciences which seem to deal in any way with the household, and mention one or more household problems that might be treated in each science; list all the social sciences which are thus related to the household and mention three practical household problems on which each of these social sciences might throw light.

Collect textbook definitions of each of the above social sciences and see if the problems of the household can legitimately be brought within the scope of the science thus defined.

16. Review the references to household economics found in classical and standard treatises on economics (see J. B. Leeds, The Household Budget, appendix); then examine critically the scientific analysis in the writings of one recent economist, and discover where the household comes in for consideration; if omitted decide just where some of its problems might be treated.

17. Prepare a digest of the idea of management in Xenophon's *Œconomicus* and compare it with the idea of household economics to-day.

18. Find the textbook distinctions between "agricultural economics" or "rural economics" and "farm management"; and

then apply the distinctions found to the fields of household economics and home management.

19. "Economic illiteracy is our most dangerous form of illiteracy." Is this true also of household economic illiteracy?

20. Outline the place of an economics of the household in the program of home economics education.

21. "The home is an economic and social institution." Distinguish these functions.

22. List different types of homes on an economic classification; a social classification; an educational basis. Of what types is the most successful home you know? Can you explain any reasons for its success?

23. Do you notice differences in families as regards (a) relations to income; (b) relations to property; (c) economic relations of parents and children after latter have left home? Give illustrations. Suggest other important characteristics in which families vary. How would an average colonial household vary from an average rural household to-day?

24. "The household is a strictly business undertaking." Criticize or modify to express more accurately.

25. "The efficiency of individual productive power turns on health and strength; mental qualities; moral qualities; and social conditions." State the relation of the household to each of these factors.

26. There are three avenues to social reform: improvement of heredity; improved training of the individual; improved environment for the individual. Where does the household chiefly exert its influence at present?

27. Do general social conditions affect the work of housekeeping? Illustrate.

28. List the economic benefits conferred by the home on the child; classify them; evaluate them by the opinion of the class gathered by a schedule which you prepare.

29. Analyze "the business of being a modern woman." (See books by Tarbell, Taber, Abel.)

30. "Man is the producer, woman the consumer." Criticize.

31. "The household controls population in quantity and quality." State Malthus' principles of the growth of population.

32. Show how the household creates utilities of form, of time,

of place. Does this establish the household as a productive agency? Is a kitchen fire a production process or a consumption process? A furnace fire? How about the worker's cottage heated from the kitchen range?

33. "Household production will go simply because it is not large scale production." Is all outside business large scale—law, medicine, teaching, preaching, nursing, art, and architecture, hand trades? Will the processes concerned with personal values and individual qualities ever be organized entirely on the large shop scale?

34. Some productive work is now done in the home. Why not take it all out into factories? Is there any part that cannot be taken from the home? What? Are there parts of housework that could just as well be regularly done outside? What? Why are they still done within the house? What are the psychological hindrances to more rapid industrialization of housework? the economic hindrances? Study the process of industrializing some part of housework, as baking; the bakery trade, growth, present condition, sanitary control.

35. Can you think of a home in which no productive work is carried on? No consumption?

36. Outline the history of the household in America as regards production for an outside market. (Tryon, *Household Manufactures in the United States.*)

37. If children were all brought up in institutions (as many orphans are), would it affect industrial efficiency?

If workmen lived in barracks as soldiers, would it affect industry?

38. What is the difference between using an example from the household to illustrate a general principle of economic science and using economics to solve the problems of the home? Illustrate.

39. Survey households as to the interrelation of the business interests of husband and wife in terms of the following and other categories which you may draw up:

A. Husband and wife each shield the other from worries or consideration of the other's individual business and household problems.

B. Husband and wife confer occasionally on his business

and her household matters, at least upon very important matters.

C. Husband and wife confer rather commonly upon business and household matters.

40. Discuss the economic influences related to marriage.

41. Draw up a schedule of inquiry on "The Economic History of a Family," on which college students might report regarding their own families.

42. What economic factors are involved in family desertion? (Joanna Colcord's *Broken Homes.*)

43. Examine the influence of inheritance laws upon the family. What would seem to be the advantages of systems of freedom of bequest, compulsory equal division, primogeniture?

44. Would you approve, for America, the custom of parents giving a marriage dowry to daughters? What would be its effect on size of family, age at marriage, unity of family? What other results? If the daughter were to have a dowry should the son also? Do we often endow our children now? How? (See Abel, *Successful Family Life,* chapter on "The Start in Life.")

45. Contrast the town family with the city family as to economic conditions of the household.

46. What economic factors contribute to the homeless condition of certain individuals? (See Solenberger, Alice W. *Homeless Men.*)

47. Is there an argument for making husband and wife jointly responsible in law for living expenses of the family? Who should determine domicile—husband or wife, or both? With the economic interests of which one is domicile particularly concerned?

48. List economic conditions or practices inside the household that tend to strengthen the family bond; that tend to weaken it?

49. Work out the plan for a pageant or play on epochs of family life in a certain community, starting with the pioneer home and introducing the successive economic backgrounds of local housekeeping.

Problems on Income

1. Make a schedule analyzing the items of *real* income in a family to be filled in by members of the class. Examine the data on distribution of all money incomes. (*Income in the United States,* Bureau of Economic Research.)

2. Examine the last annual report on the United States Income Tax for facts on taxable incomes.

3. Collect data as to usual wages paid in different trades and occupations of both men and women in the local community and list according to wage differences. Try to account for differences.

4. Make a chart showing in detail the administrative and managerial responsibilities of husband and wife in a typical household. Distinguish this enterprise function from household labor.

5. The modern housewife must be a skilled laborer, a planner, a good financier, one who dares take risks, a person of decision of character, thrifty in the accumulation of capital, and enterprising in its adaptation and use. Explain in terms of the household as a *productive* agency.

6. Do some kinds of housework produce more wealth than others? Is the home woman's time ever wasted? Does it pay to mend? To make bread? To mind a child? To knit? To embroider?

7. The housewife's services in the household are worth:—1. "What she could earn outside;" 2. "What a servant would cost;" 3. "What a managing housekeeper would cost;" 4. "What special workers for specified numbers of hours would cost." 5. "Are entirely immeasurable." Criticize.

8. Estimate the money value of products produced by a certain housewife in a year of housekeeping, including cooked meals, canned food, clothing made, laundry and cleaning done, etc.

9. Supposing a specially trained woman found it necessary or advisable to work productively outside the home, either part-time or whole time—What home activities would be most essential for her to keep contact with?

10. List the possibilities of part-time productive employment for the rural housewife; for the urban housewife.

11. Since the housewife is a contributor to production why is it that in the census she is reported among the "not gainfully employed." Suggest a limited number of questions regarding housework which might well be asked in the next United States census.

12. What are the laws in your state regarding "non-support"?

13. Why do mothers in laboring families work outside the home? (See Anthony's *Mothers Who Must Earn.*)

14. What is socialized consumption? Municipalized consumption?

15. Draft a schedule of questions to be filled out by members of the class, entitled, "My Community's Services to its Household."

16. Suggest other services which municipalities may in the future render to the household.

17. Review one or more municipal health codes as to services rendered the urban household.

18. Outline the services of your state government that have an economic relation to the household.

19. In government services that aid the household, what are the proper spheres of the national, state, and local governments?

20. Is it legitimate to spend public money for free music, tennis courts and baseball parks? List other recreational facilities you feel the public should provide. List any you feel doubtful about. Why doubtful?

21. Examine and state the possibilities of community music for the small income family. (Abel, *Successful Family Life.*)

22. How can the rural family's social income be made more nearly equal to that of the urban family's? Should certain tax expenditures be equalized throughout the state that are now centered in cities, e.g., hospital support, public recreation? Examine in detail.

23. Outline a project whereby the home and high school can cooperate in recreation of young people and adults.

24. Should the Day Nursery be a private institution or be supported by taxation? State fundamental principles for the administration of the Day Nursery so that it will strengthen, not

weaken, family life; for example, what conditions for admission, shall parents pay anything, its relation to wages.

25. "The abolition of the saloon is the home's opportunity." Explain in economic terms; in social terms. What other institutions have also a wider opportunity?

26. Do you think prisoners should be put at productive labor? If a prisoner is married who would seem to have a legal claim to any surplus over his cost of maintenance?

27. Make a survey of the contribution to housework made by the man of the family in 20 or more households. From these facts sketch a summary of the minimum, maximum and average contributions made; analyze the conditions that determine the contribution made.

28. Discuss the results of the husband's participation in housework: benefits; harmful results. State guiding principles.

29. List the first household tasks which you think a child usually undertakes—at what age, 2, 3, 5, 10, 15? Get recollection records from 20 students as to their experience; and 20 observation records of children of various ages. Appraise the value of such tasks—economically, educationally.

30. Determine the cost of maintaining a 16-year-old daughter in a $3000-income family. How much time can such a high school girl reasonably contribute to housework? What is its value?

31. What can a boy or girl earn in the usual local occupations entered after high school? How earn more?

32. How much should wage-earning children who live at home contribute to the family purse? State controlling principles?

33. Collect and analyze the experience of the class in earning money, as by household tasks, poultry or garden, by canning or sewing; by outside tasks.

34. Estimate by census facts the amount of production in American homes as compared with American industries. (Measure by number of persons working and hours worked.)

35. Analyze the phrase "economic independence," applying it to the unmarried man or woman; the married woman; the married man.

36. What benefits has the workingman's leisure brought to the family? What further possibilities?

37. Examine labor legislation in its significance for the family. (Andrews and Commons, *Principles of Labor Legislation.*)

38. "The child works out his economic independence through the family." Show successive economic stages in the child's development.

39. "The wife contributes as much to family income as does the husband." State qualifying conditions, if any, necessary to make this fairly accurate.

40. "The wife's compensation is normally precisely equal to that of the husband." Support or attack this statement and work out qualifying conditions if necessary.

41. What is the vocational guidance movement—aims, methods, personnel? What interpretation can you work out as to its relations to the family?

42. What is the relation between the money income of the family and the choice of vocations by the minor members of the family?

Problems on Expenditures

1. "Housekeeping is part of an organized system of prices." How far true? Is ability to act wisely in terms of price the fundamental need? What of the income produced within the home?

2. What is a marginal consumer and what is the effect of his demand upon price?

3. Does your demand for a commodity vary with its price? Equally for all commodities? What is elastic and inelastic demand? Give illustrations of each. What is the effect of type of demand on price?

4. Distinguish between normal price and a temporary market price. What seems to control the former?

5. "The cost of high living for some increases the cost of living for others." Explain. (H. Withers, *Poverty and Waste.*)

6. Show that general prices (or the value of money) affects

prices of goods purchased. Is the housewife interested in a stable unchanging dollar?

7. What is the effect of an increased gold supply on the value of the dollar? On prices? Do incomes go up as quickly as prices?

8. What tends to be the effect of monopoly upon prices of monopolized article? What is the effect upon the consumer's standard of living? Upon wages?

9. Is store credit used beyond 30 days in your community? If so, examine its effect upon retail prices.

10. "Money measures life." How far true? Do you prefer statement: "Use of money measures life"? Is this an adequate measure of the household? What does it fail to take account of?

11. Show that buying for the household is an act of production. (Leeds, *The Household Budget.*)

12. What general principles or guiding ideas can you suggest for household expenditures (e.g., health, proportion)? Illustrate individual consumption, group consumption of family, socialized consumption of community.

13. Upon what considerations should the expenditure of the income be based? Would it be the same for all families that received the same income? What other fundamental controls of spending?

14. Can you cite an example of expenditure for class distinction? Is there competition in "consumption"? Group people you know into several levels of wealth expenditure. Illustrate, from your own expenditures, essentials, desirables, non-essentials, superfluities.

15. What examples of luxury in consumption can you cite? Have you ever experienced a "luxury"? Was it socially justifiable? "Luxurious expenditure gives employment to workers and is therefore desirable"—criticize.

16. Suggest defects in the standards of consumption of the average high school student; college student; mechanic's family; farmer's family; well-to-do city family. When is a standard efficient?

17. "Personal-indulgence" expenditures. List them for college students; for families on $2000 a year; on $10,000 a year. What is a reasonable standard with regard to them?

18. Illustrate household buying that is lavish; mean; shrewd; luxurious; ignorant; selfish; anti-social; wise.

19. Does the doctrine of the social responsibility of wealth which is preached for the millionaire hold true for the man with $1000 a year? What difference between the millionaire's and the laborer's case. Is there a social responsibility in the case of expenditures for necessities?

20. How are our standards of expenditure set socially? Offer suggestions for social cooperation in setting more rational standards in a college community?

21. List some kinds of waste in household consumption. Is reading aloud a better consumption than silent reading? Always? If dress serves for bodily comfort only, what esthetic satisfactions may be overlooked? Are the full possibilities of food materials always secured? What other consumption wastes (not involved in the productive process)?

22. What influence, if any, has one's economic standing upon one's social status? Is there sometimes an unjustifiable connection? sometimes justifiable? Does income indicate social worth? Ever?

23. Explain Veblen's theory of visible consumption, conspicuous leisure, vicarious consumption.

24. "Modern production is large scale and more efficient. But the family as the unit for consuming goods and for spending money is practically where it was in colonial days." Criticize as to the facts, and suggest future adjustments in the consumption process.

25. How is the household as the buying agency in society to be protected against fraud? By government inspection? By increased intelligence in the individual buyer? By better business ethics among producers? Which is most important?

26. What is the right standard in judging the household, the child's interests or the parents'? The present generation alone? Should a clerk wear threadbare clothes that his son may get a legal education? Or a boy become a clerk that his father may have an auto?

27. Why are not meals made with one or two kinds of food only, and feasts with the same materials, save in unlimited quantities?

28. Why is beef a more common item of food than chicken, (regardless of dietetic questions involved)? Work out your "order of economic consumption" with regard to three different kinds of meats. Why is not venison first on the list? Is utility in consumption, or disutility in production, more important in determining the order?

29. What is the law of diminishing utility in consumption? the law of variety?

30. Classify in detail the items that go under each of the five or six usual budget headings.

31. A family's income increases from $3000 to $4000. What changes would probably take place in the percentages allotted to different purposes?

32. Which family do you think would have the most trouble living on their income, one with $1000 a year or one with $3000? Always so?

33. Make a comparative study of the minimum income for a family of five in a large city and in a small town. Show how $1600 might be expended in a small town as compared with New York.

34. What are the standards of living expected of women school teachers in the communities represented by members of the class? Analyze social indexes of the profession?

35. Compare the budget of an unmarried man in a city with that of an unmarried woman.

Problems on Capital, Savings, and Investment

1. "To save as an end in itself is vicious." Explain.

2. When occur a family's best opportunities in life to save?

3. Does the principle of diminishing returns apply to household capital? Household labor? State the principle.

4. What results from the fact that property rights can be extended beyond a lifetime? Does it stimulate production? By whom? The one accumulating the property? The descendant later receiving it?

5. Are families as a general thing venturesome and speculative in their household business operations? Cite illustrations of your points. Is willingness to risk for the household a source of individual benefit? Of social benefit?

6. Discuss household capital in relation to progress in housekeeping and homemaking.

7. Examine United States Bureau of Labor facts as to increased productivity in industry due to machinery (also quoted by Seligman, *Principles of Economics*). Suggest similar increases in household productivity and make estimates of the amount. Do you anticipate still farther increases from future applications of machinery in the household?

8. List and classify all kinds of capital goods used by the household. In which field is household capital increasing most rapidly?

9. What is the relation of quantity of household capital to the addition to family income made by a housewife's labor?

10. Does wise choice and wise use of capital require certain qualities of the housewife? What?

11. How may one lose household capital by mismanagement and misuse through deterioration? Illustrate. How conserve it?

12. "The average household equipment to-day is worth $1000." Suppose this could be doubled, what would you add? What production capital? Any consumption capital?

13. Show how "the forms of capital goods should be adjusted to each other," for example, as regards laundry equipment, to give increased efficiency.

14. Does the productivity of household capital vary according to its cost? If not, is selection important?

15. Household capital should be supplemented at the point where a dollar's expenditure will most increase productivity. Illustrate.

16. Many households suffer because the capital investment has gone for some tool that is ineffective or unsuited, and that has been bought at a smart salesman's solicitation rather than to meet the greatest productive need. Explain. How might education in salesmanship help meet this situation? List the fraudulent household devices of which the class knows.

17. Industrial capital must maintain itself by paying for repairs and replacements out of its product. Can this be true for household capital also?

18. Is fire insurance related to conservation of household capital? Is life insurance?

19. Might household mutual fire insurance be developed in America? (See Farmers Mutual Fire Insurance, Farmers Bulletins, United States Dep't of Agriculture.)

20. Collect data from cost of living studies on the amount of savings at various income levels, include life insurance, purchase of new equipment, personal improvement expenditures.

21. How much capital is needed to start housekeeping? Can it be done on $50 to $100? What determines the amount necessary?

22. Show what can be done on $250 and a "stout heart."

23. Outline a program for initial household capital, for life insurance, savings, investment and related matters for a young couple starting housekeeping. Assume such conditions of income, etc., as you need to know. Make an imaginary balance sheet for them at the end of the first year and for every ten years thereafter for fifty years. Be ready to defend your assumptions and program.

24. Secure individual estimates from class members as to household capital in homes they know best—as to its value, history of its accumulation, and annual replacement and repairs.

25. Study the financial history of a family back to the two grandfathers and grandmothers and further back if possible.

26. In five years how much could a young bank clerk save? Would this be sufficient for him to marry on?

27. Estimate what the American young woman can have in property of her own when she marries: (a) if a young woman in industry who goes to work at 18 and marries at 22; (b) if a college young woman who goes to work at 21 and marries at 23.

28. Draft questions on the aid given the daughter at marriage by money gifts of parents; and collect the observations of members of the class.

29. Discuss the importance of saving as viewed by a man of 30, father of two children. What objects in life are to him worth saving for? Also discuss saving for the professional woman, 25 years old.

30. Outline a child's-own fund:—(a) An imaginary case, date

started, ways of increasing, ideas behind it, etc. (b) Canvass the childhood experience of the class.

31. What income from investments may a family have after 20 years provided it has had (a) an income of $3000 for the first 10 years and saved 10 percent a year; and $5000 the second 10 years and saved 15 percent; estimate interest at 4 percent compounded quarterly.

32. How can a man living on a farm with house rent free and getting a salary of $50 per month be able to get ahead or at least not be dependent at the age of 60 years?

33. Suppose a family has saved money. Suggest investments in the order of: (1) degree of security, (2) size of probable income, (3) availability of transfer into ready cash in emergency.

34. Explain the features of a promissory note; is it well to loan on notes? Explain (a) a mortgage and (b) the "bond" that often accompanies a real estate mortgage.

35. Make a survey of all types of thrift and savings institutions in your community, as to the strength of its appeal, convenience of its service, interest conditions, availability of cash invested, etc.

36. What kinds of institutions in your community sell investment securities and what kinds of securities are handled? Interview a bank official as to what services his bank renders.

37. Learn if possible what principles govern the investment of endowment funds or other permanent funds in your institution. What kinds of securities are selected? What interest rate is secured? What percentage of loss is experienced?

38. Collate the experience of 20 or more persons or families regarding savings and investment. Prepare a brief schedule of inquiry as to motives, methods, results, recommendations to others.

39. Collect and analyze investment advertisements from the standard magazines. What is advertised? What facts are given? Collect investment circulars and analyze them.

40. "An industry should sell its stock to its employees—they should buy." Analyze all the factors you can list.

41. What justification was there for the government to estab-

lish Postal Savings Banks? Suggest needed improvements in the system.

42. Will it pay better to put $300 a year into a 20-year endowment life insurance, or the same amount into as much "ordinary life" insurance as it will buy; both to be cashed in at the end of 20 years? What about the amount of protection in the meantime? (See *Spectator Handbook of Life Insurance* for rates.)

43. Make a table showing (a) the amount of protection and (b) the cash value at the end of 10 and 20 years, of $300 put into term insurance, ordinary-payment life, 20-payment life, and 20-payment endowment life insurance.

44. Collate the experience of individuals and families on life insurance by interviewing ten or more persons.

45. Examine rates for assessment insurance as a temporary form of protection; compare with term policies in old line companies.

46. Examine the scheme of wage-earners' or industrial insurance as purchased at 5, 10 or more cents a week. Compare the possibilities of weekly savings in the same amount.

47. The American ideal has been that the family should be self-dependent, laying aside money for emergencies as sickness, old-age. European countries have developed social insurance to cover such emergencies. List arguments for and against the plan for America.

48. Outline the various programs of old-age pensions, industrial, and governmental.

49. How can members of the individual family cooperate in preparation for the old age of the parents (Taber's *Business of the Household,* Chap. 28)?

50. What available methods of securing short-time loans for household capital are there (aside from house mortgages)? Do charge accounts and instalment buying belong here? What financial and loaning institutions? What rates are charged?

51. Secure installment contracts for purchase of furniture or clothing, and analyze their terms.

52. Make a plan for a school savings system. Try it for a month or more in your own class.

53. Outline a syllabus for teaching thrift in the middle grades of the elementary school; in the senior high school.

54. "Even the college student should be saving regularly." Discuss.

Problems on Housing

1. Show the organic relationships between the house and the home.

2. Is home ownership important in a democracy?

3. In Philadelphia the amount of house ownership in the different wards is said to be an index of independence in politics and order in elections; can you substantiate this locally?

4. Are there "types of families not to be trusted with home ownership but needing supervised occupancy"? Explain.

5. Estimate the importance of housing to health, recalling farmhouses, village situations, city housing, as you have seen them.

6. List conditions in the house and its immediate environment that would tend toward morbidity from certain diseases as tuberculosis, typhoid, influenza, children's diseases; compare the detached house and multiple dwelling as to health.

7. Analyze your own psychology of housing, as regards source of esthetic and social satisfaction; sentiment value of "home" at various ages.

8. List the useful educational experiences for adults in connection with an owned house; for children.

9. Collect data on the history of ground values for a given block in your community during the last 30 years or more.

10. Make a value map of a section of your community showing values per front foot in different blocks, business and residential, and on different sides of the street in the same block. What controls these values?

11. Examine the relation of land cost to housing congestion. How is land cost affected by zoning restrictions? Would a tax policy that took future increments in land value into the treasury tend to check tenement construction?

12. Make a chart showing the average number of persons per acre in your local community; if possible secure population and area figures for different wards or sections of the city and

get comparative figures for crowded and less crowded sections in the county and the state in which it is located.

13. Study the factor of relative location in your community as affecting rentals. What other aspects of sites are important?

14. List housing conditions that should determine a family's selection of a house. Put your points in the form of a housing score card. (See Commons, *Journal of Home Economics*, 1909.)

15. Take a definite five-room house plan, and a family of five; analyze the over-crowding factor—when and how will "over-crowding" be likely to occur?

16. Analyze the idea of step-saving applied to housing, and list all the possibilities of design and structural arrangements to effect this type of economy.

17. Replan a house that you know well so as to improve ventilation in bedrooms and in kitchen; so as to provide an isolation room for the sick, available also as an occasional guest room; so as to reduce distances in housework, and other improvements.

18. Privacy is a fundamental function of housing; show how this is afforded by different types of construction.

19. Analyze the storage factor in a given house suggesting improvements and better facilities throughout.

20. Make a list of questions which you could take with you in going over a number of houses with a view to purchase. (See Taber, *Business of Household*, p. 129.)

21. List the faults in house planning and construction as reported from actual observation by class members; classify as to cause, and suggest the social methods of eliminating causes of such mistakes in future building.

22. Draft a schedule for use in a survey of sanitary and economic aspects of dwelling houses (Veiller, *Housing Reform*).

23. Make a class survey of types of houses in the local community in whole or part as to single detached houses, double houses, two-family houses, row houses, apartments.

24. Outline a detailed argument for the detached house as contrasted with the apartment house.

25. Granting that apartment houses are to continue in cities,

what additional service could the landlord furnish (compensation for them to be included in the renting contract)?

26. Is the argument for suburban living conclusive? Is the apartment ever better? What about unmarried business men and women? The aged?

27. In city apartments which floor is most desirable?—list your criteria; include regularity of water supply, heat, sunlight, laundry.

28. Analyze the factors that increase costs of apartment house construction as compared with the detached house; factors that decrease the cost.

29. "The apartment is favored because woman, the home-maker, regards personal ease and does not think of her business as family-building. You cannot raise the nation's children in an apartment any more than you can raise our wheat in greenhouses. It may be harder work to live in a detached house than in an apartment, but we will never rise as individual families or survive as a nation in that way." Discuss.

30. Gather facts on the history of housing in your own community: earliest and succeeding types built; history of individual houses; houses that have been altered; slums.

31. Examine critically the building plans of any institution at hand.

32. When is it advisable to own rather than rent a home? What are the deciding factors?

33. Why do people prefer to rent rather than own their home?

34. Secure copies of leases used locally and examine their terms.

35. Explain the following terms regarding real estate: Warranty deed; quit-claim deed; joint-tenancy deed; search of title; abstract of title; title insurance; Torrens system; mortgage foreclosure; exemption of homestead; dower rights.

36. Rents are rising; what reasons can you suggest? Are any factors controllable?

37. Secure rental figures for houses of various sizes and apartments of different numbers of rooms and work out such statements of rent variation as you can.

38. In some cities there has been a monopolistic combine of

building material and labor interests. What efforts might be made to stop such price raising?

39. Give one or more actual house valuations either for purchase value or rental value, naming town or city, size of house, etc. How change rental value into capital value?

40. By a survey of your own community, study the factor of permanency in building. What percentage of brick, stone, concrete, tile houses are there, as compared with frame construction?

41. What rules in your state cover the division of real estate between widow, children and other relatives when the deceased leaves no will?

42. Why must one pay interest on a house mortgage? What determines the rate?

43. Are loans for housing construction and improvements in housing equipment productive loans?

44. Analyze the institutions that loan on house mortgages. Are they equally available in all communities? Make suggestions for improvement in some community which you know.

45. A house mortgage for $4000 will be reduced $500 a year until paid off. Find the cost of carrying term life insurance for a sufficient amount to cover exactly the amount of the mortgage year by year, supposing it to cost an average of $15 per $1000 per year.

46. "A mortgage over one's house is desirable since it makes it easier to sell." Does such a mortgage ever carry disadvantages? What?

47. Federal farm loan mortgages are amortized in 10 to 40 years as desired by borrower. Would amortizing mortgages on dwellings be a desirable universal type?

48. In a community of detached and owner-occupied houses what housing reforms are in the power of occupants? What ones may require community action?

49. If there were no adequate housing law in your state or locality, outline the steps necessary to secure and make effective a housing law.

50. Draft a system of zones for your community including (a) use districts—for retail business, manufacturing, detached houses, apartment houses, and (b) height districts. Can new

radial streets be laid out so as to scatter population by new trolley lines? What other larger plans can be made?

51. Would you by law forbid a landlord to exclude families with children from apartment houses? Does it make it harder to find a shelter? Does it not protect children from a type of housing unwholesome for them?

52. In what ways may low housing standards on the farm affect the health of the town?

53. Outline a concrete program for improvement of rural housing, including five improvements listed in order of importance.

54. What mandatory requirements would you make with regard to rural housing, if you were drawing up a law? Could it be enforced?

55. The Garden City Movement in England, and Co-Partnership Housing in England. Discuss.

56. Supposing you were to be a resident in a corporation-built town. What would be a desirable basis of ownership or of management and rental, mutually satisfactory to corporation and individual citizens? Suppose you were to go on strike? Or wish to sell and remain in town as renter? To move away? What other contingencies might there be?

57. The housing of the non-family woman has been given much attention; is the housing of non-family young men as worthy of attention? Why?

58. "The average small American city is a garden city already." What differences?

59. Examine the growth, present facilities and costs of public storage available to the household in a given community.

60. Investigate experience with district heating plants or central heating. (State Public Service Commission.)

61. Outline possible vocations that may arise between the home economics and the housing fields. Particularly, the rent collector and social worker; the architect's adviser on housekeeping problems; the instructing inspector of housing; the woman realtor; the staff worker of a housing association.

62. Study the local organization of the building trades.

Problems on Food

1. Do you consider the family table an essential for a home? What elements does it contribute to family life?

2. Draft three questions that will cover the most important points as to the adequacy of a family's diet.

3. Work out your own calorie or energy requirement of foods per day according to the standards given. Do the same for a family of two; outline a day's dietary that will provide this requirement.

4. Determine typical dietary standards of the class by keeping a seven-day record of foods chosen and then compare with standards given in Chap. VIII, making recommendation for improvement as to dietary selection or expense. Where could such a device be used?

5. Study controls of individual food choice. Make a list of strong individual preferences for foods and strong food dislikes; circulate a check list for measuring class members; estimate the effect of idiosyncrasies in increasing costs, in increasing housework. How can food fancies be curbed?

6. Take post at the checking counter in a school lunch or other institution dining-room where meals are served on order; check 100 or more orders on a schedule form arranged for rapid recording of choices made. Criticize choices as regards too much starchy foods, too much meat, lack of fruits and vegetables. Sum the choices made in terms of the food groups represented. How does the proportion vary from the standards suggested? Might a food counselor render service at such a post? Are such records of a single meal conclusive?

7. Make a form for your weight record to be taken weekly for a year, the entry to be (a) in table form, (b) in graphic form. How apply the device socially?

8. Foods are increasing in price. What factors seem to influence prices? What factors are controllable by education? By legislation? Municipal action?

9. Over a period of three months or more make a market record of retail prices and wholesale prices for certain standard foods as potatoes, lettuce, flour, eggs. Take your retail prices at one store on a definite day in the week, Wednesday or Thurs-

day; find local wholesale prices in the newspaper or a special trade publication. Plot the prices on cross-section paper so that you can compare changes in wholesale and retail prices and also measure their spread or difference; do retail changes follow immediately or lag behind wholesale changes? Why? Explain price changes as far as possible.

10. Take one commodity, e.g., flour of a standard brand, and survey different types of stores on the same day. Account as far as possible for differences in price.

11. Make a list of the different foods that you use, grouping them according to their food value and place opposite each the current price per unit as accurately as you know it; then verify prices by inquiry; then classify each group as to cheap, moderate and expensive foods.

12. Study the food cost for a family for a week by making (a) an inventory of what is on hand and its cost; (b) a record of what is bought; and (c) an inventory of amounts on hand at the end of the week. (d) Figure total costs and divide by number in family and seven (days) to get cost per capita per day; (e) also get per man per day cost from the data.

13. In a given family or in an institution, estimate the entire costs involved in the food service, covering food costs, marketing, rent costs, equipment, labor, fuel, etc., so as to get an inclusive cost for food. What is its relation to the cost of food materials alone?

14. If in a family of father, mother, girl of 10, boy of 6 and girl of 4, the father has 15 meals at home and the rest have all meals at home, and the food cost per week is $12, what is the per-man per-day cost of food materials?

15. Study costs of table board and of room accommodations for young women living in a community, or in different communities. Grade quality of service and accommodations and compare with prices.

16. How would you attack the problem of reducing food costs in a family with no hired worker? With one employee?

17. List foods that could be purchased annually, as coal is often purchased; foods to purchase monthly; weekly. How large an income did you have in mind?

18. Food waste—list all possible sources inside and outside

the home and have individuals score the order of importance of the causes in their own homes and compile results to show range of importance; express in table and in chart.

19. Make a class survey of food waste by weighing waste of edible materials at home for a week and estimating its value; food waste in a cafeteria or institution. Determine controlling causes. If possible check waste in a cafeteria against waste in a table d'hôte service.

20. List possible economies in fuels for cooking. Study the special economies possible with natural gas fuel. (See bulletin of United States Bureau of Mines.)

21. List the dishes and utensils used in a rather elaborate table service; see how many may be eliminated in a family service for a home in which the woman does all her own work. State the saving as a percent of the first number.

22. Keep a record, or ask your mother to, of the time spent in planning and preparing meals in an ordinary day or period of days. Compare with this the time spent in planning and preparing when meals are planned ahead, purchases made at one definite time, etc.

23. Figure the cost, in time of preparation and amount of fuel, of different methods of preparing foods, e.g., potatoes boiled, mashed, French fried, chips, baked, stuffed, etc.

24. Does home canning of vegetables and fruit "pay" and how much? Outline an experimental cost study.

25. Outline methods of keeping food records: market lists; food purchases; storage records; menu records; etc.

26. From the census find the distribution of population by age-groups; then find by the Inter-Allied Food Index, the total food requirement of the United States in per-man per-day units. What is the ratio of per-man per-day units to per capita units? (The commission used .8.)

27. Analyze food material costs of a large dining room or cafeteria so as to show the costs for each of the chief food groups as a percentage of the total food material cost.

28. Make a survey and census of the food-retailing agencies in your community or a section of it; classify into general types as dairy, meat, fruit, etc., then subdivide each group, for example, in what ways and by what agencies is milk sold; what

types of meat stores are there in relation to the stock carried, the form of business organization; who handles green vegetables; is there a farmer's wagon market; what foods are hawked about by hucksters; can you get any measure of the amount of mail order buying; what are the more usual combination of stores used in family's marketing? Make a market location map with symbols for different types of stores.

29. Make a survey of the number of persons buying on different days of week and at different hours of the day in one or more stores; if possible get inside records showing telephone calls, orders taken, etc. Study also methods of selection followed.

30. Do improvements in transportation tend to move the field of production farther from the consumer? Is this a gain or loss? How?

31. What is storage-in-transit privilege in railroad shipping? Is it of general advantage in handling food?

32. Make a survey of the sources of food supplies of a community, first as to produce of local origin and the routes by which it comes into the community; next as to perishable foodstuffs shipped in by railroad; and then as to sources of staple groceries. Make a constructive program for improving local produce shipments into this place.

33. Make a survey of delivery costs in one or more local food stores. Find the extent of non-delivery and delivery trade; estimate costs of delivery as a percentage of cost, and devise various proposals whereby a dealer might make a price differential between delivered and non-delivered orders. Estimate the savings on a monthly family food bill of $90 if non-delivered.

34. Make a historical study of local retail food stores.

35. Investigate the local control of food stores by the department of health.

36. Suppose a city woman's club wishes to improve the sanitation and effectiveness of the local retail food markets; what suggestions would you make as to plans so as to get full cooperation of dealers?

37. List the items that can be purchased from hucksters, farmers, and the public market. Study the huckster problem critically.

38. Is there a local food emporium or food department store in your community in which you can purchase all kinds of foodstuffs? How do its prices and services compare with neighborhood food stores?

39. Chart and compare the steps from the food producer to consumer in the case (a) of California oranges handled by a cooperative shipping association, and (b) of ungraded eggs sold by a farmer to a local rural storekeeper who ships eggs.

40. Analyze 25 homes as to dependence for ready-to-eat foods upon bakery, delicatessen, etc.—precisely what foodstuffs? how often purchased? How much cooked fresh meats are purchased?

41. Do you believe food advertisements? Who pays for advertisements? Would you adopt as a rule: "Never buy advertised food articles," or "Buy only advertised brands"? Collect and classify food advertisements.

42. Is the telephone justifiable as a marketing method? Is it economy to carry parcels home?

43. Why do not all the housekeepers in a city street form cooperative buying associations? What difficulties? Outline rules for a housekeeper's buying club.

44. Analyze national food laws (Sherman's *Food Products*); state laws (write Secretary of State at State Capitol); local food rules (local Board of Health.)

45. Make a report on the Wisconsin code for bakeries (State Industrial Commission) as an example of detailed control of sanitary standards.

46. Analyze the proposal that all food containers must carry a label stating average food values as regards calorie content and protein quality and quantity; also possibly vitamin value.

47. Investigate the monopoly problem with regard to food industries.

48. There has come in several quarters the proposal to declare milk a "public utility" as is electricity, gas, transportation, and bring its production and sale under state supervision. Discuss.

49. Explain the international food situation. How nearly is America self-sustaining? As regards its own food supplies

could it be absolutely self-sustaining? (Pearl, *The Nation's Food.*)

50. List the objections of class members to a plan of families living in congregate quarters with food services in common.

Problems on Clothing

1. What topics of clothing economics (aside from its making) might be taught boys and girls alike in schools which would tend toward better standards and economy in this field of expenditure? In what regular school subjects could such useful facts be introduced?

2. Is your own dress a source of artistic satisfaction to you? Is that of others? Have you noticed the clothes of any one favorably or unfavorably in the last two days? How many times?

3. Clothing serves a double purpose: (a) shelter and protection and (b) decoration. Estimate in your own case the share of expense ascribable to (a) and (b).

4. In selecting a garment how much attention do you give relatively to fabric quality and how much to "fashion" or "mode"? Can you combine intrinsic fabric quality with a moderate mode and get the best results? Illustrate.

5. Compare cost and utility of ready-made vs. custom-made or homemade goods in any single item of clothing.

6. Canvass class opinion: should a student's service dress be renewed seasonally, or selected of fabric and mode making possible longer wear with slight readjustments in the garments? What issues besides personal choice are involved?

7. Collect class data on types of clothing in relation to cleaning and care costs.

8. Draw up a set of rules for handling a child's clothing allowance from five years of age to the time of self-support. Note changes necessary when old enough to earn; to do own shopping independently. At what age can self-shopping begin?

9. Are men influenced by fashion? Give examples.

10. Would you be satisfied to have women's clothing as static in style as men's? Why, or why not?

11. Investigate the kinds and amounts of work put upon their

own wardrobe by members of the class. Work out results on cost of living, on quality of wardrobe, academic standing, social results, recreation.

12. Indicate the wise limits on the man's responsibility for care of his own clothing—in a family where the woman does all her own work; in a large income family.

13. Should single women be expected to repair their own clothing? Single men?

14. Is there any way for the home woman to dispose of the work of mending clothing? What would it cost in communities represented to have a mending woman once a month?

15. Study local clothing markets, as to types of stores, location, kinds of goods and grades carried, advertising policies, methods of sales, bargains, send for examination, delivery, returns. Make a location map, using symbols for different types of stores, that will show the location of local clothing stores in the entire city or a part of it.

16. What is your experience as to different standards of clothing houses in advertising dress goods?

17. On what different bases can there be a bargain in clothing? What constitutes a bargain to the buyer?

18. Collect advertisements of men's and women's clothing and work out the psychology of appeal.

19. Study the economic and social problems of the millinery trade (VanKleeck's *A Seasonal Trade*).

20. Ascertain local wage rates for workers in clothing trades, and in custom dressmaking and millinery work. How do they compare with other employments and with minimum wage standards as understood locally.

21. Examine the organization of the garment trade workers and the goals of their organization.

22. Have the class make an inventory of their present clothing wardrobes, estimating the total original investment in clothing of different sorts and finding the percentage investment in each type. Estimate the length of service each item of the wardrobe will give and the yearly cost for each type of clothes; turn these into percentages.

23. How much is the value of your family wardrobe, measured by the purchase prices of items? What percentage is this

of your family's annual income? What is your own share of total clothing cost? Compare with dietary index as to your relative food cost compared with total family food cost.

24. Outline a proposed distribution of purchase of your outer garments over a 2-year period, then over a 4-year period. Which seems to give better results?

25. Compare the clothing budget of a teacher, a nurse, a stenographer, a housewife, living in the same community. Compare the clothing budget of an unmarried man in a city with that of an unmarried woman in the same city, on the same salary.

26. Assuming that clothing costs for individual members of a family vary in the same ratio as food costs by the Inter-Allied Food Scale, find the clothing allowance for each member of a family composed of father, mother, son of 18, daughter of 16, son of 12; the total clothing allowance to be 15 percent of the $3500 income.

27. Plan a four years' clothing wardrobe for a high school student.

28. A person or family has to reduce its clothing expense one-half—how will it probably be effected?

29. What proportion of the cost of a charitable institution housing 50 children is given to clothing costs? Is the economic saving through similarity of garments of inmates justified when compared with the loss in esthetic and personal values?

30. Plan an inquiry as to the economics of clothing disposal by students and by families. What is made over for self; what for children; what given away; what sold and to whom; any other disposition? On what basis are clothes discarded?

31. How much of clothing making should an all-round homemaker be able to perform?

32. Design a record book for your outfit of clothing, to show a description and history of garments purchased, by appropriate columns for descriptions, date, cost, where purchased, length of wear, disposal.

33. Outline a method of studying habits of clothing choice and care among a group of students. Analyze their experience as to the following factors that affect clothing costs: expensive personal taste, occupational requirements, high social standards,

unsystematic choice, ignorance of materials, carelessness in use, other factors.

34. Make up a clothing appraisal table with columns: Items of clothing, selected for (a) shelter; (b) appearance; (c) occupation; (d) social convention; (e) recreation; (f) rest; (g) probable length of service. Then enter down the first column the different items of your wardrobe and put a check mark in the columns (a) to (e) as may be necessary for each item, showing the functions of each item of clothing. Then in column (g) enter the probable length of service.

35. Draft a score card for judging the adequacy of a wardrobe by listing the important points and their respective subpoints and allotting 100 points to the table. Score your wardrobe.

Problems on Household Operation

1. Define "labor" as the economist understands the term. Does this apply to household labor? Is compensation in money necessary? Is working for somebody else rather then self-service? Is irksomeness rather than enjoyment of effort?

2. List the controllable factors that reduce efficiency in housework.

3. Explain the "scientific shop management" program and its suggestions for the household. (C. Frederick's *New Housekeeping* or *Household Engineering*.)

4. "Productivity in housekeeping efforts can be most quickly increased by attention to the weakest and least productive points in the undertaking." Explain and illustrate.

5. Does the housewife's state of mind affect her efficiency? Does it affect the family's real income? Explain.

6. Classify the relations between house structure and housework.

7. Make concrete suggestions for a shorter workday in a household which you know well.

8. Estimate by census facts the amount of production in the nation's farm homes and in urban homes in labor hours.

9. Take some single item in household work and outline possible improved methods which will make for economy and efficiency.

10. Study use of time by class members, who are to keep personal time records for a week, classifying different activities and noting time of beginning and ending of each activity. Summarize each individual's time record and find range and average times of group for each activity.

11. Each student may report the usual schedule of the housewife in one or more homes—hour of rising, work schedule, rest hours, weekly recreation, retiring hour, etc. (Student may report recollection records of own home; and at vacation make accurate time study.)

12. Make a record form for studying time required for various household tasks, the record to be kept by the housewife. Compare with times given in text.

13. Ask ten housekeepers their wash-day and analyze reasons for their choices.

14. Make a list of the number of ways in which a student can adopt the self-service plan and effect a considerable saving of expenditures.

15. "I do not approve of self-service or a cafeteria in a home for working girls." Justify or attack the statement.

16. Get from United States Occupational Census figures for number employed in commercial laundries, and other statistics of growth in 1900, 1910, 1920, in your state, and compare with total population. Is the laundry growing more rapidly than population? How about domestic service? Suppose the rate of change continues till 1930, 1940?

17. Why do state governments commonly supervise public service companies? What is the situation in your state?

18. List all the services extended to housekeeping by business enterprises; canvass 20 or more communities through members of the class as to which of these services are available and which are used in their own homes.

19. Outline possible communal services for the private household which might be supplied by municipal governments; by landlords.

20. Collect facts as to fuel consumption in different households; size of house, temperature, type of heater, amount of fuel, etc. (Use an accurate method if a family will cooperate for a winter, see Technical Paper 97, United States Bureau of

Mines.) Work out a similar method for studying light consumption.

21. Collect standards for fuel allowances used by family relief organizations.

22. Investigate the method of charging for gas in terms of heat units instead of candle power (see Taber, page 152, and Bul. C 32, United States Bureau of Standards).

23. Examine relative local costs of coal by basket, by ton, by car lot. How can smallest income families find a more economical method of purchase? Outline a cooperative plan.

24. Secure a chemical analysis if possible of different local samples of coal, and work out the differences in net costs for heat units purchased.

25. Estimate the monthly cost of fuel for your college room. Is the heating system best suited for that type of building?

26. Outline a schedule for studying dish washing in the homes of students as to equipment, supplies, processes, time required. Show how the data would be elaborated.

27. Examine the economic factors in laundry work (a) done at home; (b) sent to a laundress; (c) sent to a commercial laundry.

28. Collect from 20 housewives estimates of the number of times a sheet will wash at home; in commercial laundry. Investigate experimentally.

29. Draw up a set of criteria for testing the managerial ability of a housewife, assuming the questions are to be answered by members of women's clubs, and the answers scored.

30. By what means can the life of furniture be prolonged, and the replacement fund be reduced?

31. Outline a project to teach the purpose of the home to a junior high school class, seeking results as regards participation in housework and the personal life of the home.

32. Removal of dust is a large item in housework. How much housework per week (measured in time) does dust now occasion? Describe an (approximately) dustless house; dustless town.

33. Make a comprehensive study of cleaning in your institution (time and work factors): number of workers; hours worked; square feet of surface cleaned; equipment; cost.

34. Measure a kitchen as to distances between working centers; after observation make estimates as to the distances covered daily, weekly, monthly, yearly, in usual kitchen work. If possible measure also by pedometer. Plan a reorganized kitchen that will save steps. Estimate the percentage saved?

35. "Motion study" to save losses through unnecessary motion is one item in "scientific management"; study dish washing or table service as a series of muscular movements. Do you see possibilities of elimination?

36. System saves work. What does this mean practically? Give some concrete household examples. Make a work plan for a household without hired help, assigning some tasks to children and certain duties to the man.

37. Storage spaces, cupboards, drawers, boxes, etc., have been specially designed for office use. Consider the materials of the household which require storage. What special storage cabinets, etc., can you suggest for brooms; for linen; for silver.

38. Fatigue is a problem in housework. Make out a program for reducing fatigue when a woman does all her own work.

39. Outline the possibilities of introducing specialization into housework. How many kinds of specialist can the housewife be? Can the husband contribute special knowledge? Children of high school age? Employed part-time workers?

40. "Labor efficiency in the home is decreased by interference of homemaking with continuous work." Which should give way—children or the work?

41. Make a "labor audit" of the household (see Tead and Metcalf, *Personnel Administration*).

42. "The labor problem of the household is to be met by making labor very efficient so that a given amount of exertion accomplishes more than under ordinary conditions." Explain and illustrate.

43. In a family of the smallest means in which the housemother is overworked, what readjustments for her relief are possible? What others are possible for the town family of comfortable income? What for the farm family in comfortable circumstances?

44. Make a class compilation as to household cooperation

by members of the family—husband's share, daily, weekly, seasonally; and children's work contribution.

45. List the kinds of things in the household which get out of place and which make up the work of keeping things in order; assign the responsibility for these to different members of a family.

46. "One day's rest in seven" is a common industrial standard. Outline a plan to apply the idea as fairly as possible in a household where the woman does all the housework.

47. "No night work for women between 10 p. m. and 6 a. m." Does the standard of this labor law find acceptance in housework? How about the farm woman?

48. "No industrial work for a month before and after childbirth." Should this restriction hold for the woman's own housework?

Problems on Household Equipment and Service Enterprises

1. Which is the more important for successful housekeeping, the person or the equipment?

2. Compare the usual professional equipment and conveniences of the housewife with those of the nurse, teacher and other workers. Set a standard for the housewife's working equipment.

3. What is the difference between a tool and a machine? What in the household corresponds to tools in industry? Think away all tools and equipment from the household and describe what housework would be like.

4. Does it take as much mental power and skill to sew by machine as by hand? to wash with the tub as with the power washer?

5. Does machinery ever throw people out of work? What happens to them? Suppose machinery reduced work done in the household by one-half? What would happen to the home women?

6. What problems might a household experiment station undertake regarding machinery and equipment?

7. How is the machine related to the increase in the cost of living? Or does it decrease costs?

8. List the household operations to which labor-saving machines are applied.

9. List other labor-saving machinery found in an institution; could they all be adapted for the home?

10. Suggest needed household inventions—for example, a device for washing the outside of windows from inside a room.

11. What percentage of economy in production is ascribable to modern machinery?

12. Give fundamental reasons why there is so little power machinery used in the home. List the reasons in the order of importance.

13. "Large-scale industry may be applied to housekeeping through cooperative organization and through large-scale commercial service companies." 1. List the types of cooperation (a) successfully reaching the home and (b) suggested for this field. 2. List the commercial services (a) rendered the household and (b) possibilities of the future. Which seems the more promising method? Why?

14. Outline the reasons for city bath and laundry houses.

15. Canvass central heating possibilities in your community by interviewing one or more persons knowing facts about local power plants.

16. Outline a business plan for a household cleaning and service company in some community that you know. Sketch the organization, equipment and capital required including a fund to guarantee the organization for three years. Estimate earnings and expenses for the first two years.

17. Investigate the cost of an intramural telephone system within a residence and discuss its use.

18. Study the possibilities of electric power throughout the household.

19. What standards should govern in the purchase of labor-saving household equipment?

20. Find the cost of half-inch pipe per 100 feet, faucet, sink, and drain-pipe—to put running water in a farm house from a spring above the house. (See mail order catalog.)

21. Explain the "hydraulic ram" and how it works in putting water from a stream into a house. Estimate costs of such a system.

22. "Machinery tends to lower the quality of labor needed in productive process." Would this be true of power household equipment? What is the quality of much present household labor? Can it be lowered?

Problems on Domestic Service

1. As an employer, what qualifications would you desire in a domestic worker?

2. Would you be willing to have your household employees members of a union?

3. Would you take a domestic service position? If not, why not? Were you going into service what conditions would you desire?

4. What would be the probable effect on quality of domestic worker if the average household were more adequately equipped? If household tasks were generally lightened by transfer to industry?

5. "Can I afford a maid?" Analyze the controlling factors.

6. What should be attitude of children to housework in the home where labor is hired? In the home where housemother does the work?

7. Why is the proportion of women in domestic service decreasing? Is there a real decrease in demand as well as in supply? What is the relation of industrialization of housework, of machinery in the home, to this demand?

8. Examine census data on domestic service (following Rubinow, *Journal of Political Economy*, Mar., 1906).

9. Study the supply of houseworkers in local labor exchanges or intelligence offices; in the "want adv."; and by personal interviews with employers and employees.

10. Do you regard immigration as the most hopeful source for houseworkers? Or the trained graduates of vocational schools? How can such work be made attractive to the latter type of worker?

11. Should real wages or money wages be the standard in comparing housework and other employments? Will this be as important in the future?

12. Collect facts as to the local rates of pay for houseworkers of various kinds; rates in different sections of the country.

13. Might high wages for household labor result in low cost? How?

14. What is the accident hazard in domestic work? Can it be reduced by preventive measures? Should the residuum of risk be insured against? How?

15. If a houseworker is injured in a laundry machine, or burned at a stove, so that she loses a week's work, is the housewife legally responsible for her wages? For medical expenses? For damages?

16. Gather the experience and observation of 20 housekeepers regarding accidents to domestic workers, entering for each the number of years reported on, and the accidents occurring. Work out an equation or accident rate. Does social insurance seem desirable for domestic workers?

17. Get records of the workday of ten or more domestic workers and seek governing conditions; then make a tentative schedule for a more extended inquiry of the time factor in service.

18. Study the service situation in an institution and chart tasks, time allowances, and the system of organization.

19. A laundress who comes to you Tuesdays, works for your neighbor Mondays, and has her other days taken except Saturdays when she is free. When it rained Monday, your neighbor asked you to give her your day, Tuesday, and take Saturday. What is your reply? Why?

20. Inquire as to children under 12, 12 to 16, and 16 to 18, doing domestic work in your community.

21. Look up the amount of child labor in domestic and personal service (United States Census, 1920, Occupations of Children) and make comparisons with other child labor statistics.

22. Show the relationship of prohibiting child labor in domestic service and of providing educational opportunity.

23. Suppose you were a supervisor of home economics in a city; outline a plan for training persons for domestic work. Would you bring employers into it? What sources of worker would you explore?

Problems on Advancement

1. If the choosing of partners is the first "business" decision related to housekeeping, mention the social arrangements that tend to make such choice rational in that it is self-expressive under guidance.

2. Make a list of false cultural motives sometimes present in family life, e.g., to seem richer than you are, or to imitate others. List also motives that are acceptable in that they develop self-reliance in children.

3. Make up a personal and advancement budget for a family; assume certain facts as to family membership, income, etc., and draw up a detailed schedule of purposes and money allowances.

4. Study the distribution of advancement or personal expenditures as found in any standard budget studies and see how they compare with the system of weightings which gives the following relative importance to different items in the sundries or advancement budget of the workingman's family: Carfare, 15 points in 190; entertainment, 15 points; medicine, 15; insurance, 15; church, 30; tobacco, etc., 20; reading, 10; housefurnishings, 45; organizations, 25; total, 190.

5. Show how other departments of the budget affect expenditures for health, culture, recreation, and other personal items.

6. Make a survey of a city or town you know as to its resources for the personal life of the family. List public, commercial and private enterprises.

7. Secure average facts for 25 or 50 rural homes for the following cultural factors, and compare with Miss Ward's findings that:— the average distance to rural district school is 1.5 miles, to high school 5.9 miles, to church 2.9 miles, to market 4.9 miles, to the family doctor 5.7 miles, to the nearest hospital 13.9 miles, and to the nearest trained nurse, 11.9 miles; and that automobiles were used by 62 percent of the families and telephones by 72 percent. (F. Ward, *The Farm Woman's Problem.*)

8. Is there any possible objection to the well-rounded life as an ideal in personal expenditures? Give an example of a person attempting to cover too many fields of interest in ex-

penditures. Is some "fad" or concentrated attention upon a single activity justifiable? Should a fad exclude all other interests? Should the fad be expressive or receptive? Is it not desirable to choose something in contrast to regular activity? Illustrate.

9. Can family participation in certain activities be arranged by clubs to which one individual alone of the family belongs? Illustrate by a man's commercial club, a country club, woman's club, boy's club.

10. Collect facts on economic cooperation between members of a family extending over a period of two or more generations; note negative as well as positive facts.

11. Successful family life requires cooperation. How secure cooperation? What economic factors help develop a coordinating home spirit? What other non-economic factors?

12. What should be some of the unwritten laws or principles governing social relations in large group or institution living? Will they apply to the domestic household?

13. Plan for a definite family having children possibilities of (a) music in the family; (b) hospitality; (c) use of Sunday; (d) evenings.

14. "The grandmother in the home." Outline the services rendered. (A. G. Spencer, *The Family and its Members.*)

15. Outline the responsibility of the family budget for community charitable work. What organizations are there in a given community? Analyze their budget and the service rendered by a dollar in different organizations.

16. Study the methods of giving money to church and charity in ten families. Outline a standard plan that you can defend for a family of five on $3000 a year.

17. Outline principles that should govern plans for family vacations.

18. Make out a program for cooperation between church and home, supposing yourself an officer in a church interested in home betterment.

19. Outline social standards for the family with a lodger.

20. Show relationships of socialized religious teaching to a sound economic basis for family life, listing factors in home and in religious teaching that correlate, e.g., unselfishness.

21. Name some of the factors that count for the success or failure of the community playground. Study the organization of your local playground or some community playground. Is it adequate? Observe the points where it could be extended better to meet the needs of the family.

22. Plan a lesson or social activity for boys and girls of high school age that will stimulate the social life of the home, as regards hospitality. If an activity, will you bring their parents into it?

23. Is the family or the state responsible for the education of children? Some children leave school early. What suggestions can you offer?

24. Outline the home conditions making for the best educational results for the child in a family.

25. Sketch methods by which the family can increase its participation in local political organization and action.

26. Make a table of headings to analyze costs of going to college or other higher institution and collect data from the class.

27. Study the problem of earning while studying and work out its effects—economic, social, hygienic, etc., in terms of the experience of a group of students.

28. Outline the experiences in the daily life of the college student which may possibly transfer skills or appreciations useful in the management of a well-ordered home (include social and esthetic as well as economic considerations).

29. If a student has no money to finish college is it better to work while studying, or to borrow the money, or to earn the money and then go back to school?

30. Local transportation—outline economic standards for the use of street cars, taxicabs and of one's own auto.

31. Can I afford a car? Analyze controlling conditions. Analyze costs, including interest and depreciation.

32. Estimate the place of the motor car as an article of consumption in your community or any section of it; the horse.

33. Is it the parents' duty to pay for the college and technical education expenses of a son or daughter? Outline the principles that seem to cover the point. Collect data from class as to parts of cost borne by the parents.

34. How can an educational institution or a school provide practice in hospitality; how can it bring young men and young women to meet each other socially; suppose you were "Dean of Women," what would you do?

35. If a teacher earning $100 a month is ill for a month, losing salary and requiring ten visits of a physician at $2 per visit, medicine $10, care $10, what is the cost of the illness to her? Is the community concerned? Supposing a substitute takes her place, does it make any economic difference to the community?

36. What causes sickness? Is it unavoidable? Make a list of the general causes of sickness. For which of these is the individual responsible? The household? The community? Industry? How can each take steps to prevent sickness? Must the indivdual bear the burden of unpreventable sickness? How about unpreventable industrial accidents?

37. Malnutrition reduces industrial efficiency. Illustrate. Is industrial loss possible even if actual illness does not occur?

38. The standard should be:—a prolonged working period, not shortened by immature entrance upon enervating labor, not interrupted by preventable sickness or preventable accident, safeguarded by municipal and industrial as well as domestic hygiene; with immediate care in illness or accident, by private or public agencies, including rural and industrial nurses. How near does your community come to this standard?

39. Outline principles that should guide families and society in the matter of funeral management and costs. Could society exert more control? How? (Dowd, *Funeral Management and Costs.*)

40. List the magazines read in a group of families; find the reasons for preferences, how long the magazines have been taken, habits of use, etc.

41. Study the use of books in families; the reliance on public libraries; the books owned; when purchased, under what stimulus; what kind are owned, about how many of each kind; the use of books in the home.

42. Select a family library that can be bought for $25—first specifying the kinds of books to be included and the type of family under consideration.

43. Analyze joint or community ways of providing reading matter for the family.

44. Are book and magazine subscription agents who call on housekeepers producers or parasites? What determines the answer?

Problems on Handling Household Resources

1. The class may be divided into committees on "The $1200 Budget," "The $2000 Budget," "The $3000 Budget," or such other amounts as community conditions suggest; and problems may then be developed in terms of these standards.

2. What is the ideal of financial relations of husband and wife when the husband is the only wage-earner? When the wife has an income from property equal to his earned income? Would the "common family purse" be a satisfactory working ideal in all cases?

3. When either the wife or the husband own property as an individual would you recommend joint ownership? That is, should all property be held jointly, or part held jointly and part individually, or all individually?

4. "Should parents transfer their property to their children as an offset to their own support in their old age?" (Taber, *Business of Household,* chapter 28.)

5. Make out a list of reasons for living on a budget such as would be suitable to present before a meeting of young housewives.

6. Plot (on graph paper) the standard budgets of Chapter XVI.

7. Secure a budget report from a family showing income, savings and expenditures. Check against the standards for the general and the food budgets. Account for divergencies.

8. A family of five on a minimum standard with $1500 a year, spends $600 for food, $200 for clothes, $360 for rent, $90 for heat and light and $250 for miscellaneous. Their food money divides thus: meats, 33 percent; milk, 10 percent; cereals, 15 percent; vegetables and fruits, 15 percent; sugar, 10 percent; fats, 5 percent; miscellaneous foods, 5 percent. Suggest a better distribution of the general and the food budget.

9. A district nurse earning $1200 a year spends $500 for room and board, $400 for clothing, $50 for savings and $250 for miscellaneous. Criticize and suggest an improved schedule, detailing her clothing and miscellaneous expenditures.

10. A family that kept no accounts estimated on Jan. 1, 1923, that its property and debts had changed as follows during the year: Bank balance $420 larger than the year before; real estate, net appreciation over depreciation in buildings, $2500; life insurance, increase in cash surrender value, $320; loans receivable, $2200 more than year ago, mortgages payable, none as compared with $2000 the year before; notes payable, $1000 as compared with none year before; securities owned, $1000 more than year before. Query: how much financial progress or reverse had the family experienced during the year?

11. Outline a plan for teaching personal budgets and the household budget to high school girls.

12. Outline a project for interesting children who live at home to keep the family's accounts.

13. Outline standards for financial relations between brothers and sisters.

14. Describe a family for two or three generations and trace their economic successes and failures, accounting for them as far as possible.

15. Make a schedule analyzing the experience of members of the class with keeping personal accounts.

16. Make a similar schedule for experience with household accounts in the families represented in the class.

17. Gather the experience of 25 or more housekeepers on keeping household accounts; similarly the experience of professional women with personal accounts. Particularly locate difficulties and successes, and good and bad features of methods used.

18. Suppose the housewife enters successive expenditures down a column without classification; what does such an account show?

19. Suppose a book so arranged that food items go in one column, clothing in another, etc., what advantages?

20. Accounting takes time. How can it justify itself?

21. Should classification of accounts be rather minute, or the reverse?

22. If the housewife forgets to enter certain items, does it make the record useless?

22. Do you think a book of personal records, for example of family relationships, a growth and health record of a child, might be useful? What other personal records can you suggest?

22. What are the advantages and disadvantages of household finance records on cards?

23. Why not keep household accounts by a system of debits and credits with a journal and ledger?

24. Suggest a complete set of business records for a beginning housekeeper;—consult Frederick, Taber, Terrill, Haskin, and other authors.

25. "Running charge accounts means that I do not have to keep household accounts." Comment.

26. Canvass several business men as to their judgment on methods of handling household finance, first having definite inquiries to put to them.

27. Production records or cost accounting records are used in shops and on farms. Suggest such records for: laundering, making a cake, washing dishes.

28. "The merchant, manufacturer or farmer should make a financial measurement of his business at stated intervals." Is this true for the household? Discuss.

29. "One type of business summary shows receipts and expenditures during a past period of time, and their comparison in a net gain or loss." Explain its counterpart in the household.

30. "Another type of financial summary shows resources and liabilities on a given date and their comparison in net worth or capital." Explain these terms. Apply them to the household.

31. Outline methods of keeping time or work records and suggest their use.

32. Plan in detail a permanent inventory record book for household furniture.

33. Outline the desirable equipment for the housewife's business records.

34. Criticize the features of any household account books available as to good points and bad points.

35. Under what budget headings would you place the following items: watch crystal, olive oil, machine oil, food on vacation, candy, hair cut, ice?

36. Do any banks in the community offer special service to the household, as by the "budget check," household budget bureau, children's department, etc.? Outline possibilities.

37. Through the financial office of your institution secure a statement as to methods of keeping records of cash receipts and payments; how is petty cash taken care of?

38. Outline an account form for a record of automobile maintenance costs, using a columnar form with special headings for various operating expenses.

39. Where can money be borrowed in your community? For what purpose? On what security? At what interest rates? How is a nominal rate sometimes increased?

40. Draw up an economic platform or statement of practical principles for a student in college or normal school covering responsibility for costs of an education, earning in vacation, professional goals and progress, insurance, savings, etc.

41. Plan an ideal budget for a college student for the college year; include room, board, clothing, tuition, and recreation in detail. Draw up a statement of suggestions from an old student, to an incoming student, on student standards of living in your institution.

42. Have members of the class keep personal accounts under supervision and make a cost of living study of the data secured.

43. Make a comparative study of costs of living in a dormitory and living in an apartment with a group of students.

44. Given $1200 salary for a first year of teaching, how can one plan one's budget so as to live "happily, comfortably and healthfully"?

45. Make a plan for a permanent personal Financial Record Book which members of the class might each start. What kinds of property would have to be included: would there be any debts to be entered? Insurance? What else? Devise a book that would be useful ten years hence.

46. Make an individual's budget for money use (aside from clothing) for an individual at successive age periods of 5, 10, 15, and 20 years old. Include saving, spending, giving with

concrete objects for each. State family income, and other facts assumed.

47. Make a program for the home training of a child in various money relations, receiving gifts, giving, earning, saving, spending. List concrete experiences to be provided the child by the family's planning.

48. Outline similarly the experiences with property that may be provided for a growing child.

49. Outline a plan for a cooperative nursery to give mothers an occasional free afternoon. (See *Journal of Home Economics*, 1920, p. 73). Modify the plan to meet the needs of families of small income.

50. Outline possibilities of a consultancy service on problems of personal and family finance. How large a community would be necessary to support such a service? Suggest a scheme of services, and a budget. Suggest various other ways in which a similar service could be provided in communities.

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